

1 agggagagggc agtgaccatg aaggctgtgc tgcctgccc: gtagatggca
 51 ggcttggccc tgcagccagg cactgccc:gt ctgtgctact cctgcaaagc
 101 ccaggtgagc aacgaggact gcttgcaggt ggagaactgc acccagctgg
 151 gggagcagtg ctggaccgct cgcattccgct cagtggcct cctgaccgtc
 201 atcagcaaag gctgcagctt gaactgcgtg gatgactcac aggactacta
 251 cgtgggcaag aagaacatca cgtgctgtga caccgacttg tgcaacgcc
 301 gcgggggccc tgccttgcag cgggtgtccg ccattcctgc gctgtcctc
 351 gcactcggcc tgcctgctctg gggaccctggc cagctatagg ctctgggggg
 401 ccccgctgca gccacactg ggtgtggtgc ccagggcctt tgtgccactc
 451 ctacagaac ctggcccagt gggagcctgt cctggctcct gaggcacatc
 501 ctacgcgaag ttgaccatg tatgtttgca ccccttttc cnaaccctg
 551 accttccat gggccttttc caggattcct accnggcaga tcagtttag
 601 tganacanat ccgcttgcag atggccctc caacncttn tgttgnrtn
 651 tccatggccc agcatttcc accttaacc ctgtgttcag gcacttnc
 701 cccaggaag cctccctgc ccacccan tatgaattga gccagggtg
 751 gtccgtgtgtg tccccgcac ccagcagggg acaggcactc aggagggccc
 801 agttaaaggct gagatgaagt ggactgagta gaactggagg acagaggtg
 851 acgtgagtc ctgggaggtt ccagagagtg ggcctggagg cctggagga
 901 ggggccaggc ctacattg tggggtccc gaatggcagc ctgagcctag
 951 cgtaggccct taaataaac ctgnggata agccaaataa aaaaaaa

FIGURE 1A

[illegible]

1 ATGAAGACAGTTTTTTTATCCTGCTGGCCACCTACTTAGCCCTGCATCCAGGTGCTGCT
 TACTTCTGTCAAAAAAATAGGACGACCGGTGGATGAATCGGGACGTAGGTCCACGACGA 60
 M K T V F F I L L A T Y L A L H P G A A
 61 CTGCAGTGCTATTCATGCACAGCACAGATGAACAACAGAGACTGTCTGAATGTACAGAAC
 GACGTACAGATAAGTACGTGTCTGCTACTTGTGTCTCTGACAGACTTACATGTCTTG 120
 L Q C Y S C T A Q M N N R D C L N V Q N
 121 TGCAGCCTGGACCAGCACAGTTGCTTTACATCGCGCATCCGGGCCATTGGACTCGTGACA
 ACGTCGGACCTGGTCGTGTCAACGAAATGTAGCGCGTAGGCCCGGTAACCTGAGCACTGT 180
 C S L D Q H S C F T S R I R A I G L V T
 181 GTTATCAGTAAGGGCTGCAGCTCACAGTGTGAGGATGACTCGGAGAACTACTATTGGGC
 CAATAGTCATTCCCGACGTGAGTGTCACTCTCTGAGCCTCTTGATGATAAACCCG 240
 V I S K G C S S Q C E D D S E N Y Y L G
 241 AAGAAGAACATCACGTGCTGCTACTCTGACCTGTGCAATGTCAACGGGGCCACACCCTG
 TTCTTCTGTAGTGACGACGATGAGACTGGACACGTTACAGTTGCCCCGGGTGTGGGAC 300
 K K N I T C C Y S D L C N V N G A H T L
 301 AAGCCACCCACCCCTGGGGCTGCTGACCGTGTCTGCAGCCTGTTGCTGTGGGGCTCC
 TTCGTGGGTGGTGGGACCCGACGACTGGCACGAGACGTGGGACAACGACACCCCGAGG 360
 K P P T T L G L L T V L C S L L L W G S
 361 AGCCGTCTGTAGGCTCTGGGAGAGCCTACCATAGCCCGATTGTGAAGGGATGAGCTGCAC
 TCGGCAGACATCCGAGACCCTCTCGGATGGTATCGGGCTAACACTTCCCTACTCGACGTG 420
 S R L
 421 TCCACCCACCCACACAGG
 AGGTGGGGTGGGGTGTGTCC 441

FIGURE 2

1 M K I P T P V T T R A M L W G V S R A S S mSCA-2
 1 M K A V L L A U L L M A G E A L O P G T A mPSCA
 1 M K T V L L L L L A T Y T A L H P G A A mPSCA

 21 L M C F S C L N O K S N L Y C E K P T I
 21 L L C Y S C K A Q V S N S D C L O V E N
 21 L Q C Y S C T A Q M N N R D C L N V Q N

 41 C S O Q O N Y C V T V S A S X G I G N L
 41 C T O L G E O C W T A R I R A V G L L T
 41 C S L O Q H S C F T S R I R A I G L V T

 61 V T F G H S L S K T C S P A C P I P E G
 61 V - - - - I S R G C S L N C V D D S Q
 61 V - - - - I S K G C S S Q C E D D S E

 81 V N V G V A S M G I S C C Q S F L C N F
 76 D Y Y V G K K - N L T C C O T D L C N A
 76 N Y Y L G K K - N I T C C Y S D L C N V

 101 S A A D G G L R A S V T T E G A G G L L
 95 S G A H A L O P A A A L L A L L P A E G
 95 N G A H T L X P P T T L G G L L V L C S

 121 S L L P A L L R E G P
 115 L L L M G P G O L - -
 115 L L L M G S S R L - -

FIGURE 3

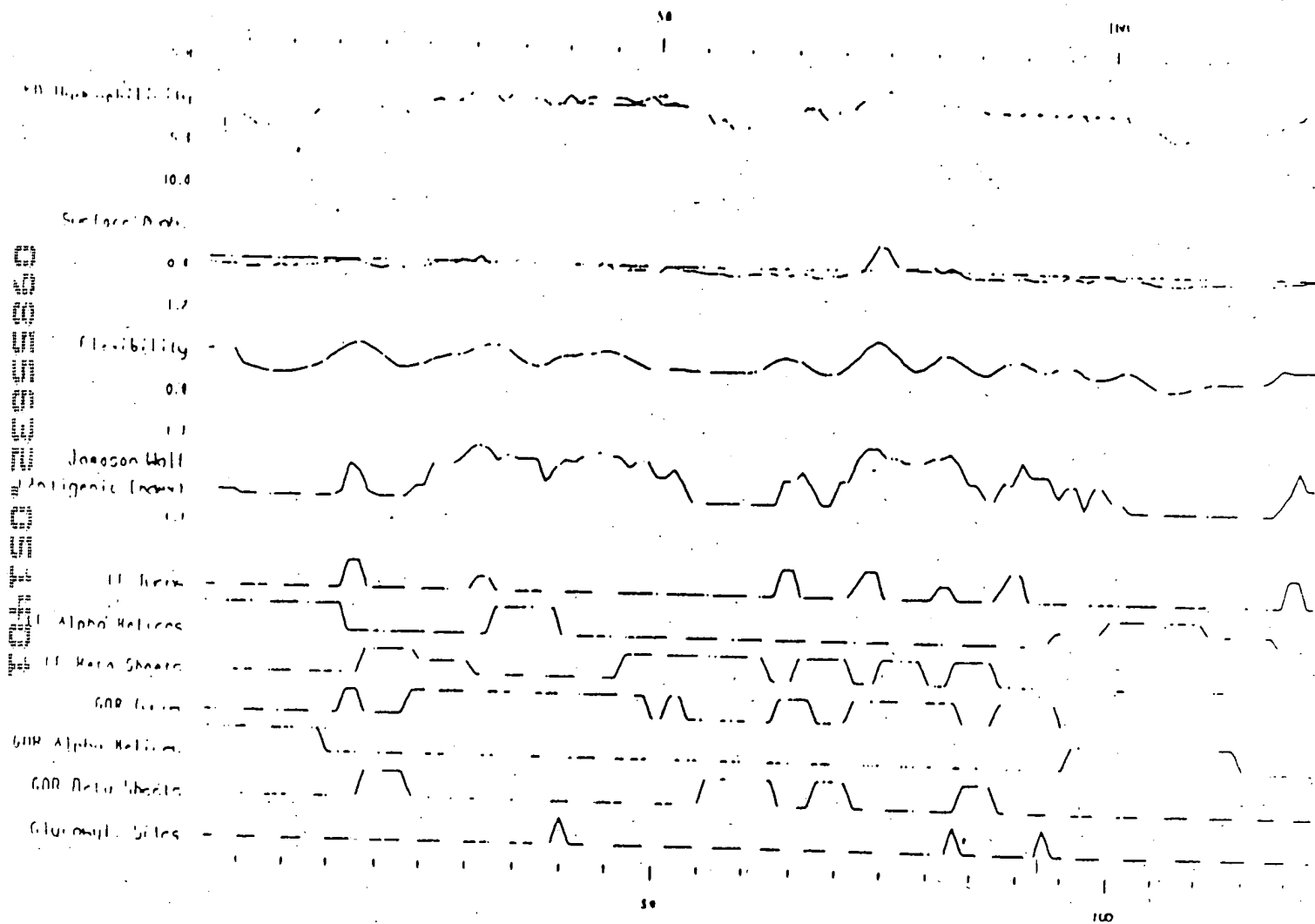


FIGURE 4

↑
Signal
reference

✓ = glycosylation site

✓ GPI signal

FIGURE 5

168
1:100

prostate (Kunur)
prostate (Bakke)
prostate (dick)
Bladder (Kunur)
Bladder (dick)
Bladder (Kob)
Kidney (MBOU)
Kidney (WUZ)
Testis
Sm. Intest.

UAPC9

FIGURE 6

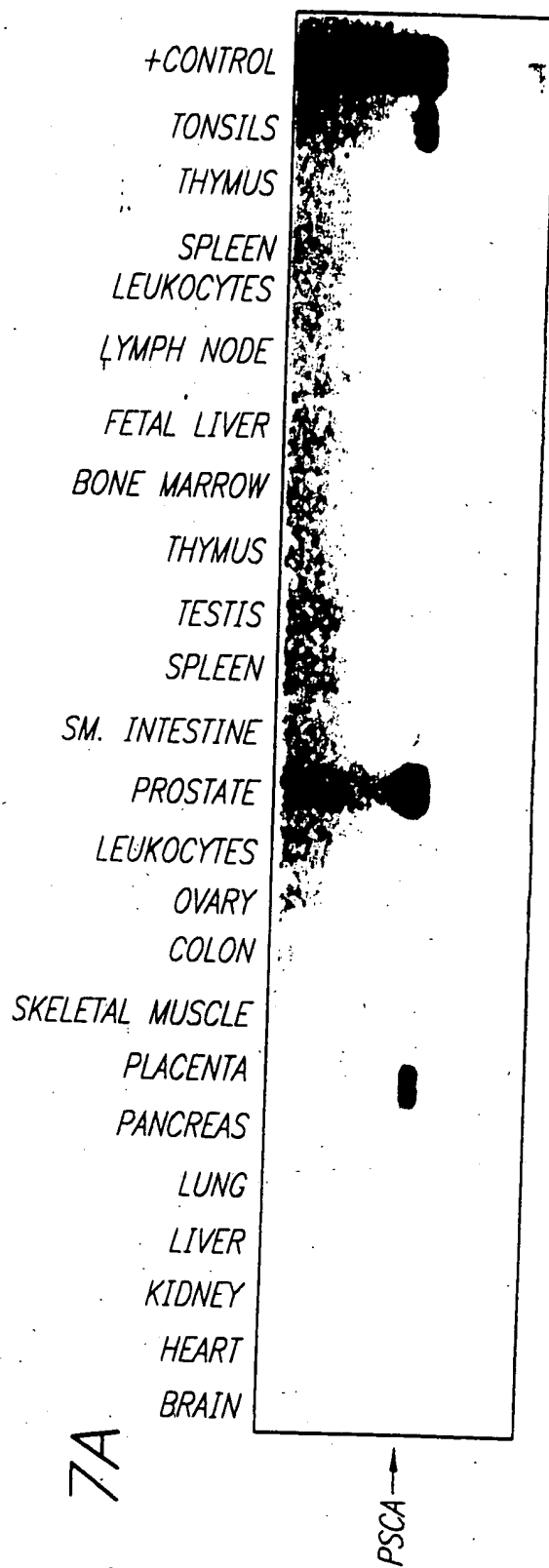


FIG. 7A

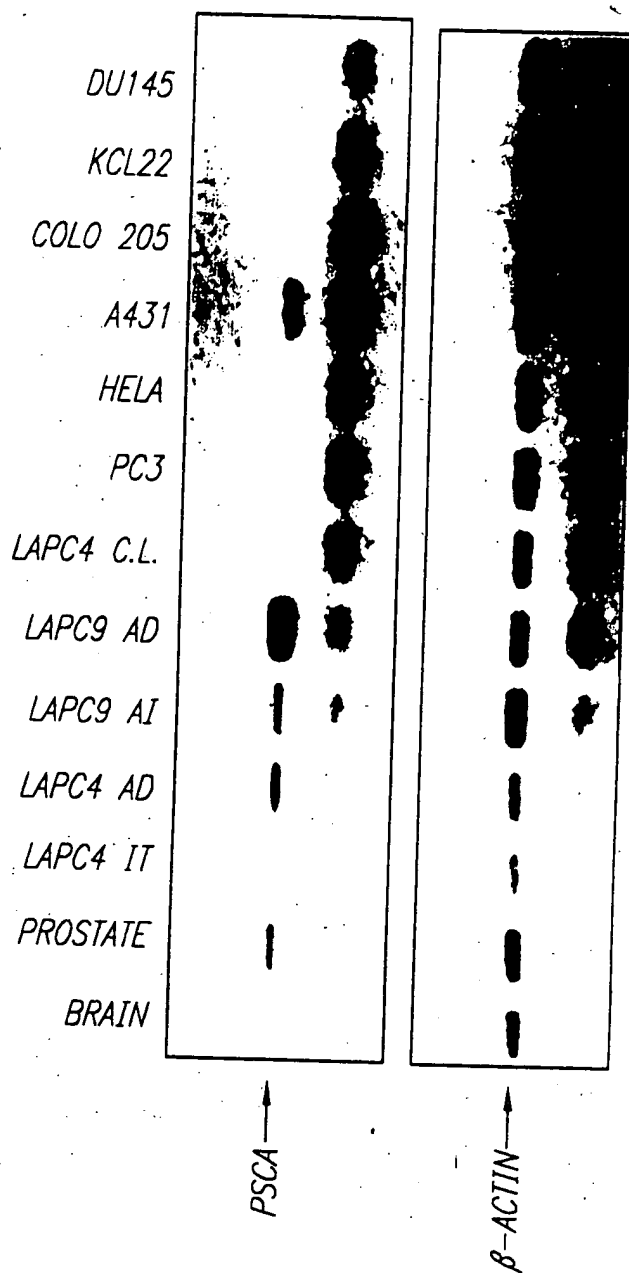



FIG. 7B

FIG. 8A

Legend:  untranslated region of PSCA


 translated region of PSCA

Fig 8A

FIG. 8A

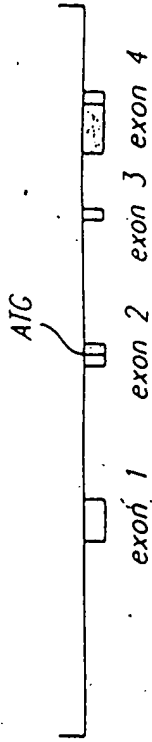


FIG. 8B

FIG. 8B

FIGURE 8

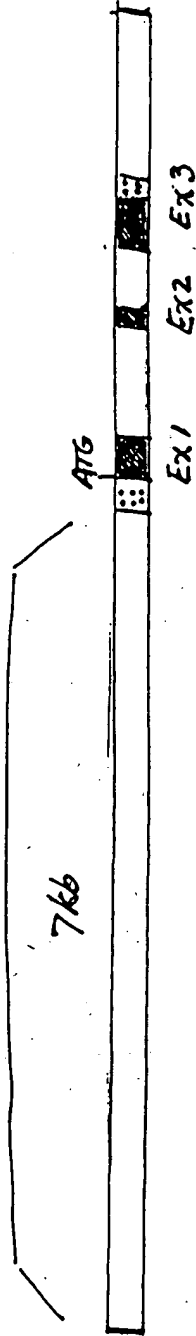
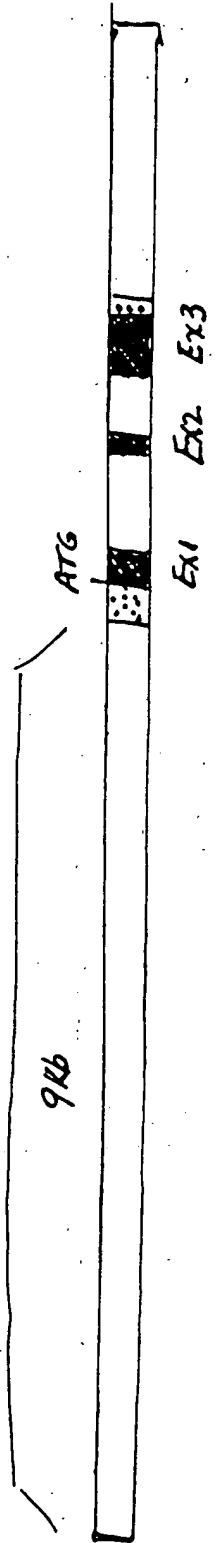


FIG. 8C

FIG. 8C



PSCA / PSA Expression in Benign Prostate vs. Prostate Cancer Xenograft

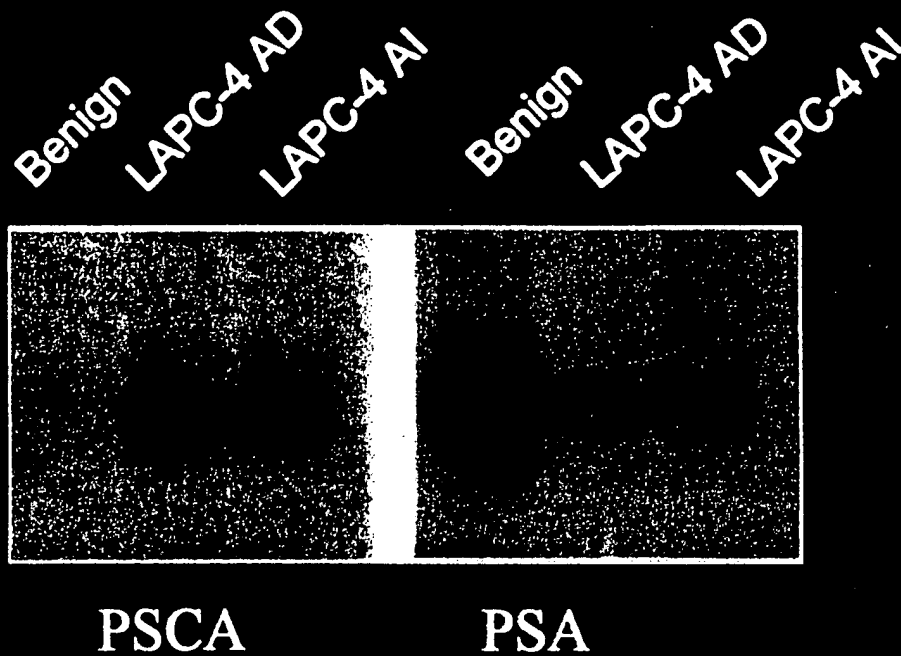


FIGURE 9A

~ 1kb

HEART

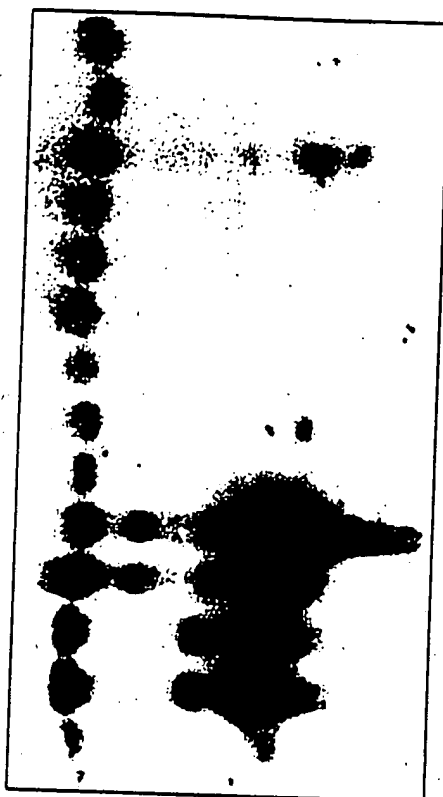
SPLEEN

PSCA

FIG. 9B

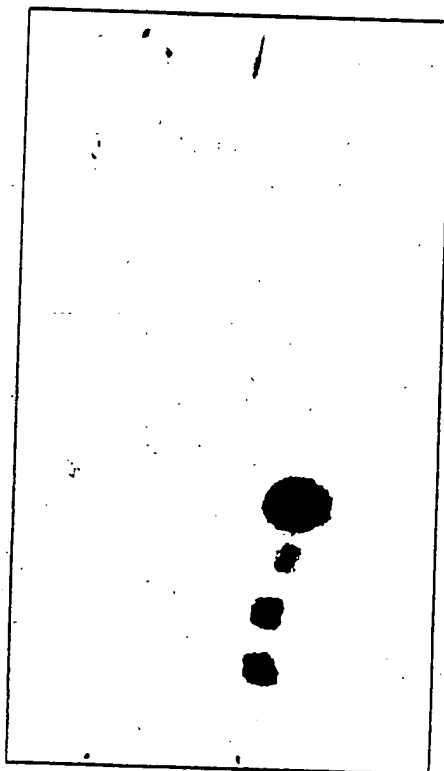
72 HRS

KCL22
COLO 205
A431
HELA
DU145
PC3
LNCAP
LAPC4 C.L.
LAPC3 AI
LAPC9
LAPC4 IT
LAPC4 AI
LAPC4 AD
BPH



4 HRS.

KCL22
COLO 205
A431
HELA
DU145
PC3
LNCAP
LAPC4 C.L.
LAPC3 AI
LAPC9
LAPC4 IT
LAPC4 AI
LAPC4 AD
BPH



PSCA

FIG. 10-1

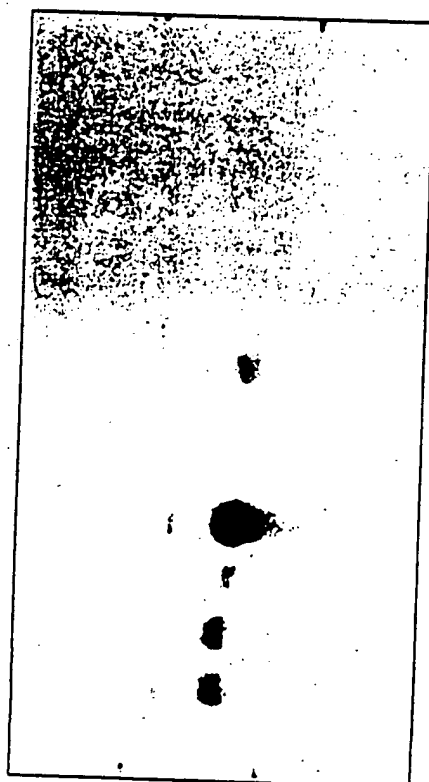
72 HRS

KCL22
COLO 205
A431
HELA
DU145
PC3
LNCAP
LAPC4 C.L.
LAPC3 AI
LAPC9
LAPC4 IT
LAPC4 AI
LAPC4 AD
BPH



4 HRS

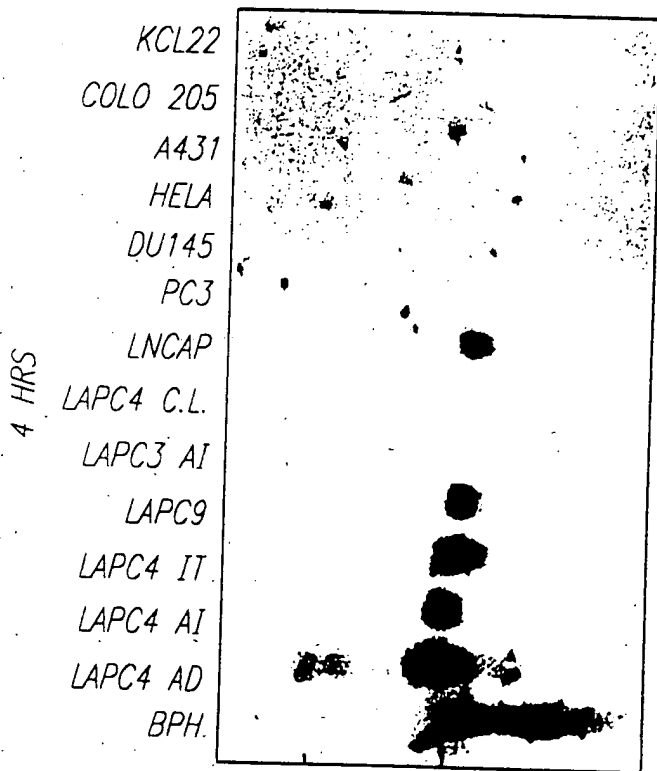
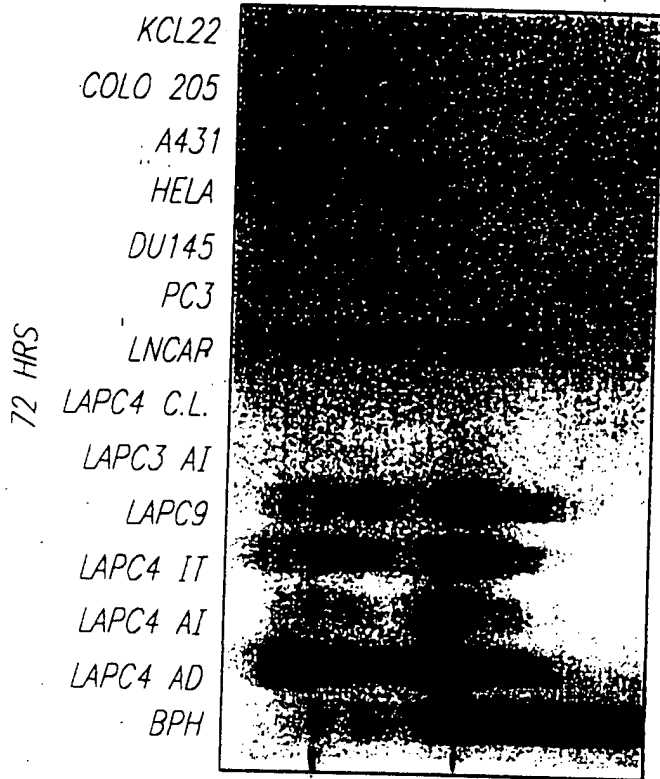
KCL22
COLO 205
A431
HELA
DU145
PC3
LNCAP
LAPC4 C.L.
LAPC3 AI
LAPC9
LAPC4 IT
LAPC4 AI
LAPC4 AD
BPH



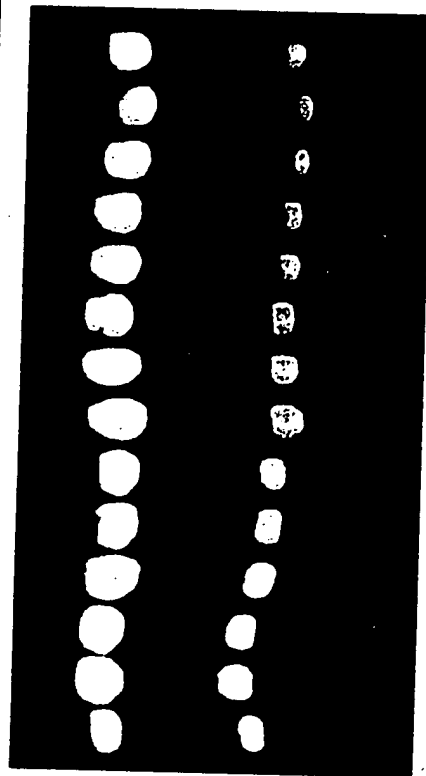
MSA

FIG. 10-2

104-20-20000



PSA



ETBR

FIG. 10-3

FIG. 11A



FIG. 11B

SECRETED

SECRETED
CELL ASSOCIATED

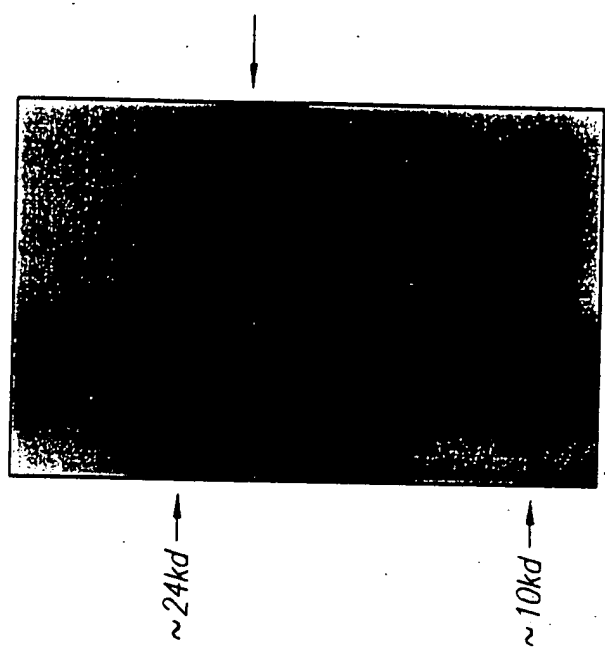


FIG. 12B

O GLYCOSIDASE

N GLYCOSIDASE F

CONTROL

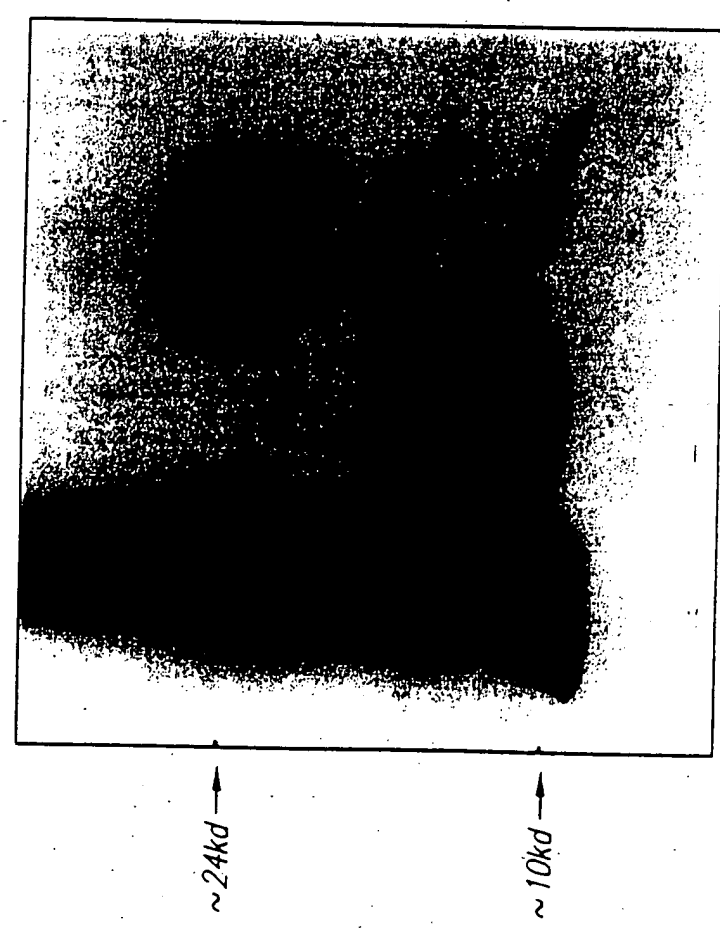


FIG. 12A

293J971003008 293J971003010 293J971003012

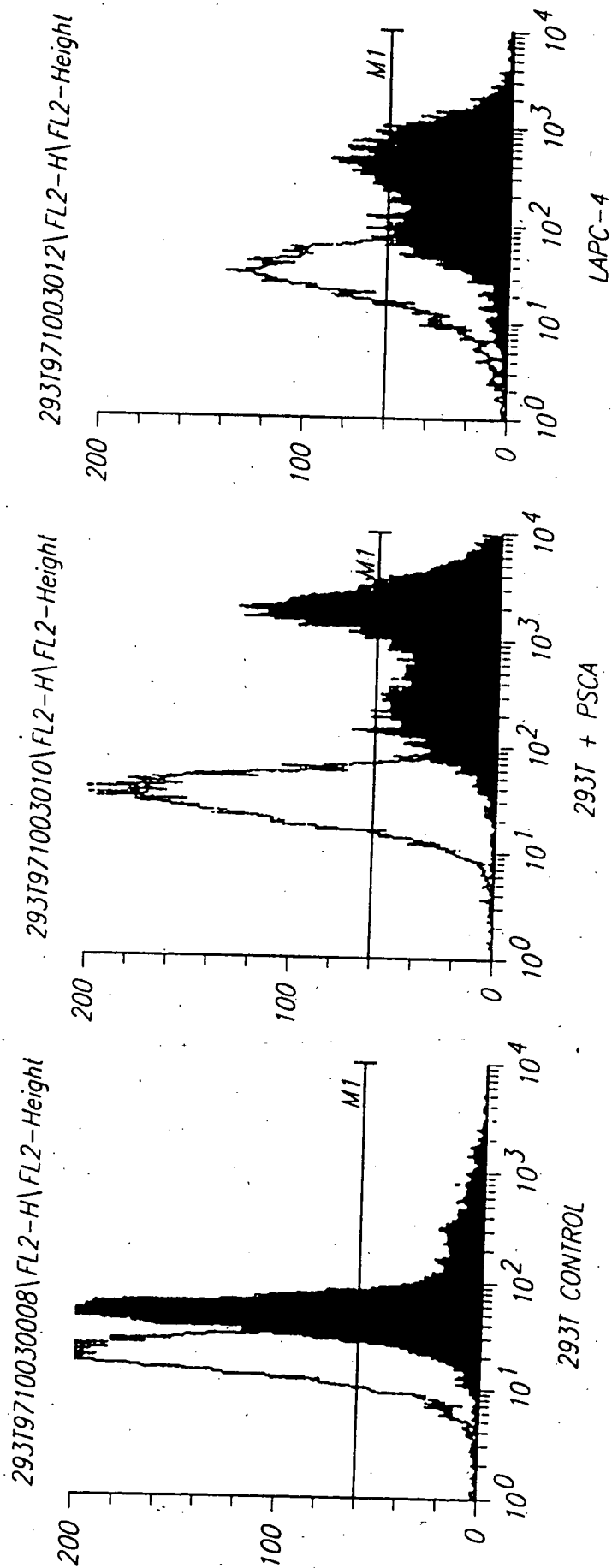


FIGURE 12C

PSCA Maps to Chromosome 8q24.2



Fluorescent
in Situ Hybridization
Analysis of PSCA

FIGURE 13

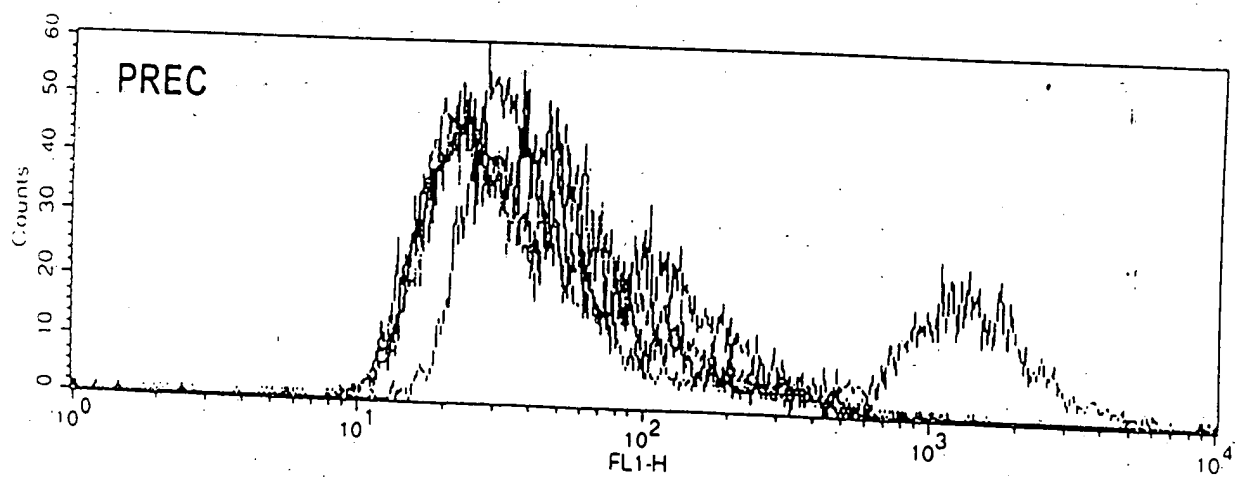
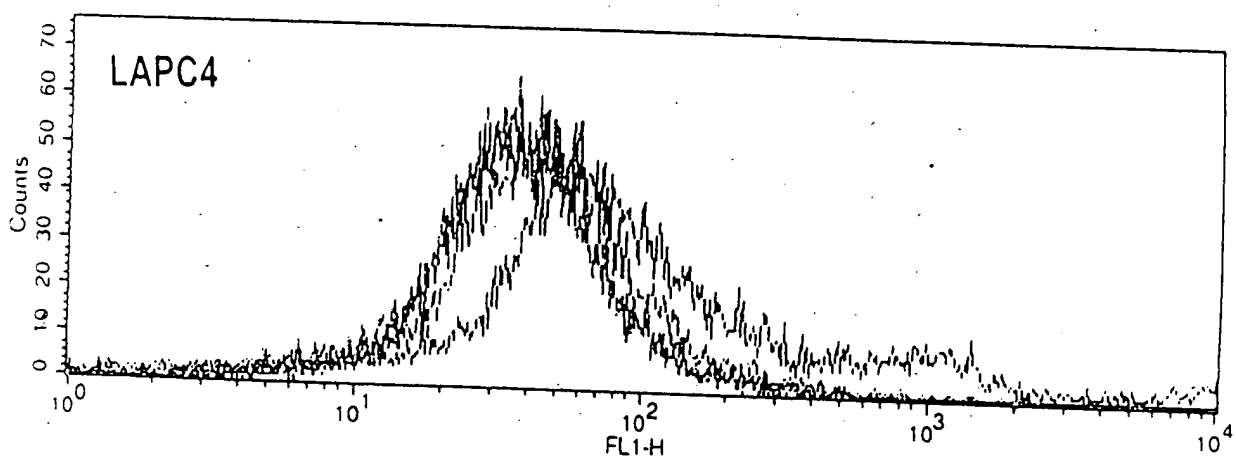
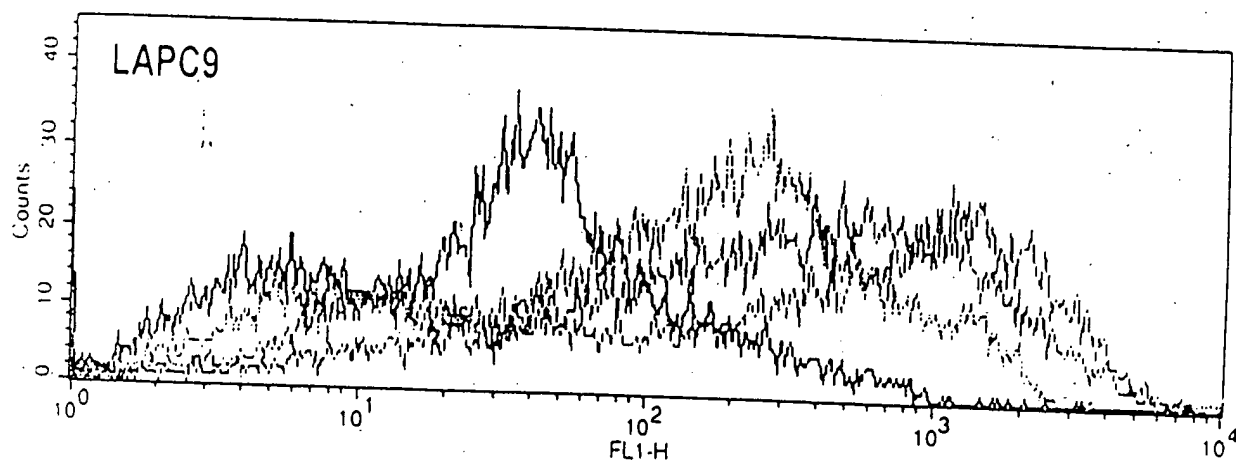


FIGURE 14

A

Epitope map

mAb	Isotype	EL (18-98)	N (2-50)	M (46-109)	C (85-123)
1G8	IgG1 k	2.039	0.007	0.628	0.000
2H9	IgG1 k	1.318	0.863	0.032	0.021
3C5	IgG2a k	2.893	1.965	0.016	0.005
3E6	IgG3 k	0.328	0.024	0.069	0.370
4A10	IgG2a k	2.039	1.315	0.000	0.014
2A2	IgG2a k	1.366	0.733	0.010	0.003
3G3	IgG2a k	2.805	1.731	0.004	0.000

B

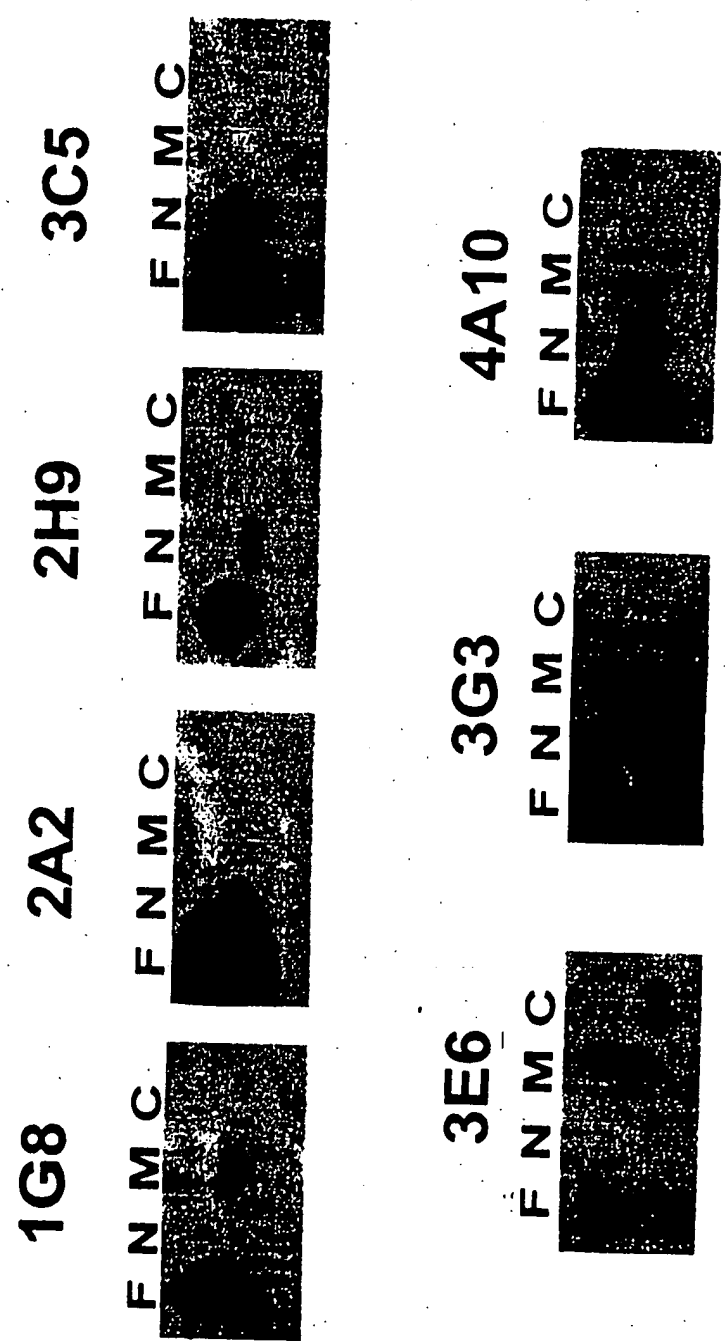
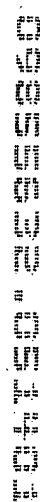


FIGURE 15

Prostate Stem Cell Antigen (PSCA) is a GPI-anchored Protein



(Reiter, R.E., et al., 1997. *PNAS*)

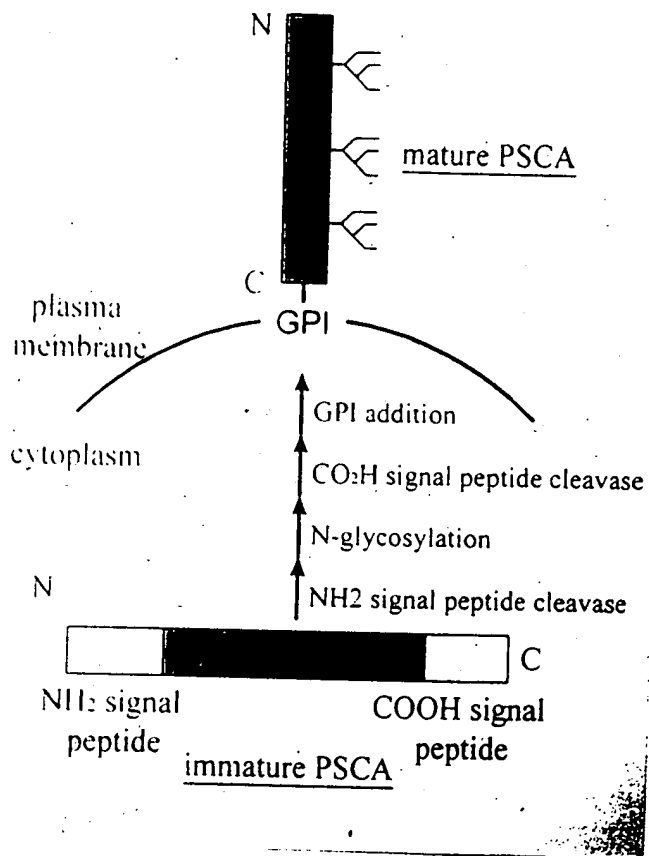
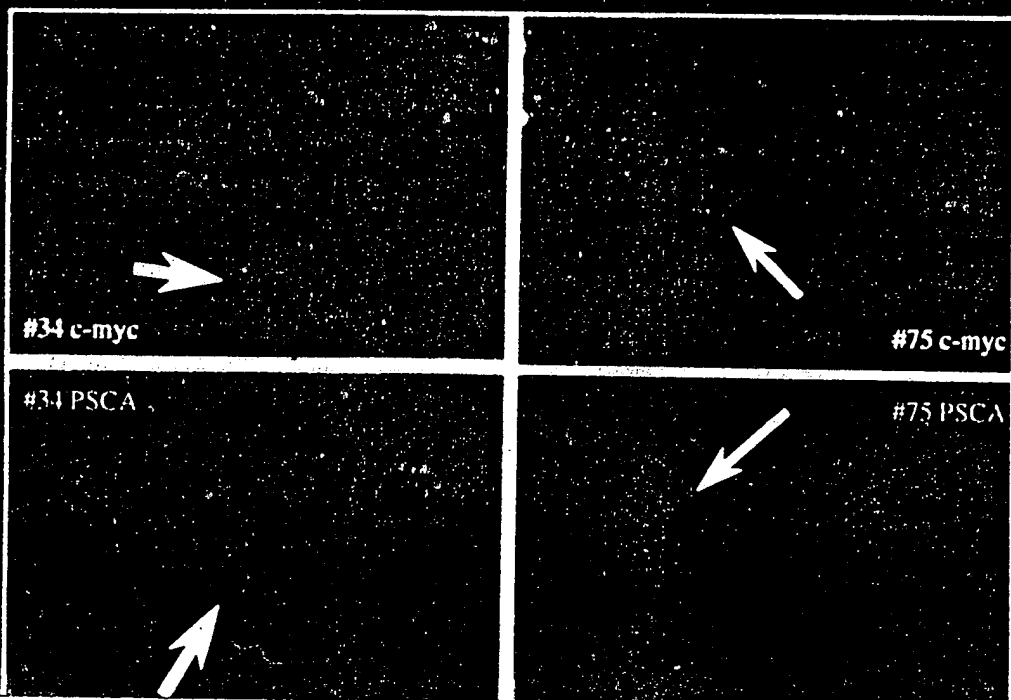


FIGURE 16

FISH Analysis of PSCA and c-myc in Prostate Cancer

Gain Chromosome 8

Amplification



R. Jenkins

FIGURE 17

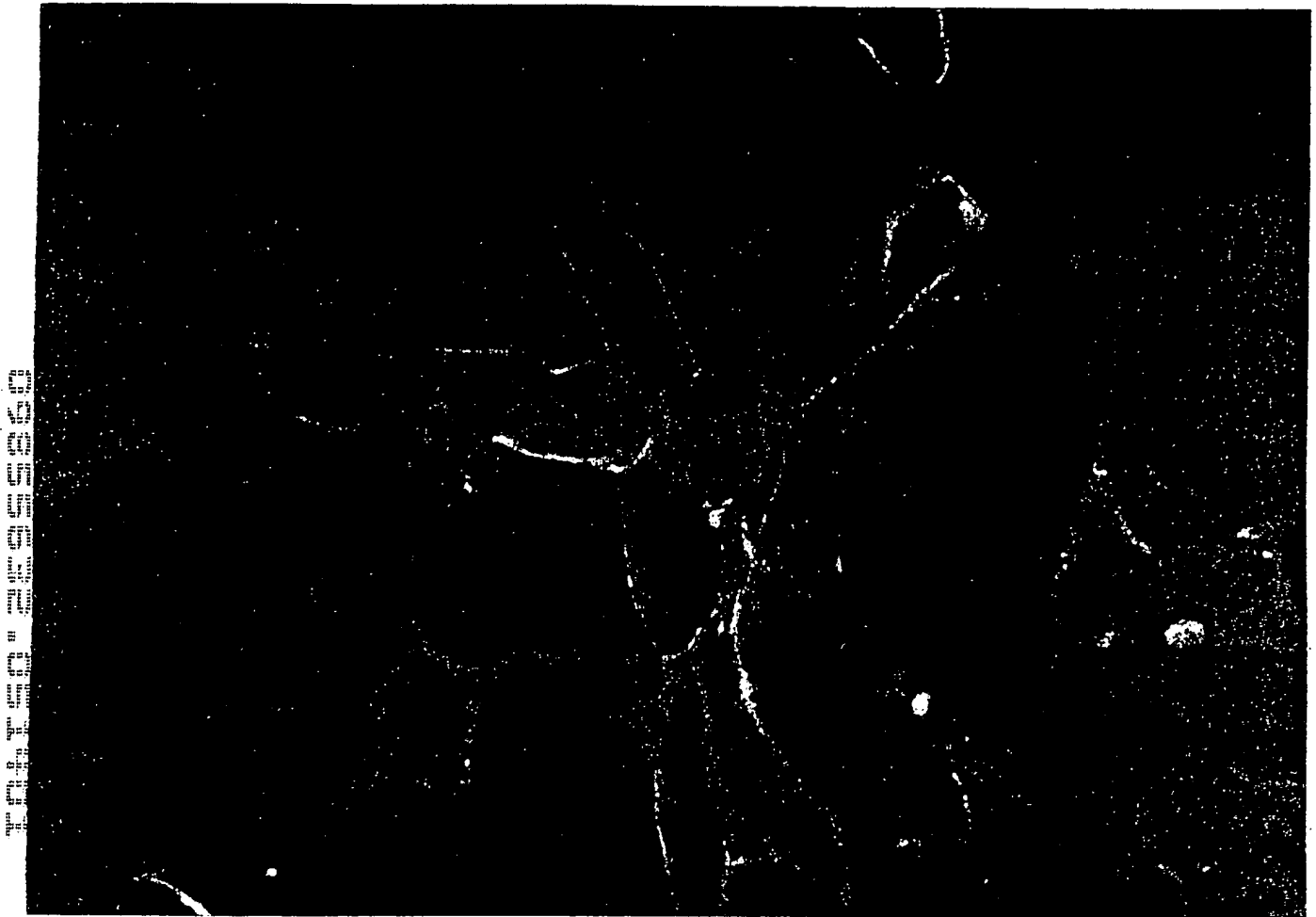


FIGURE 18

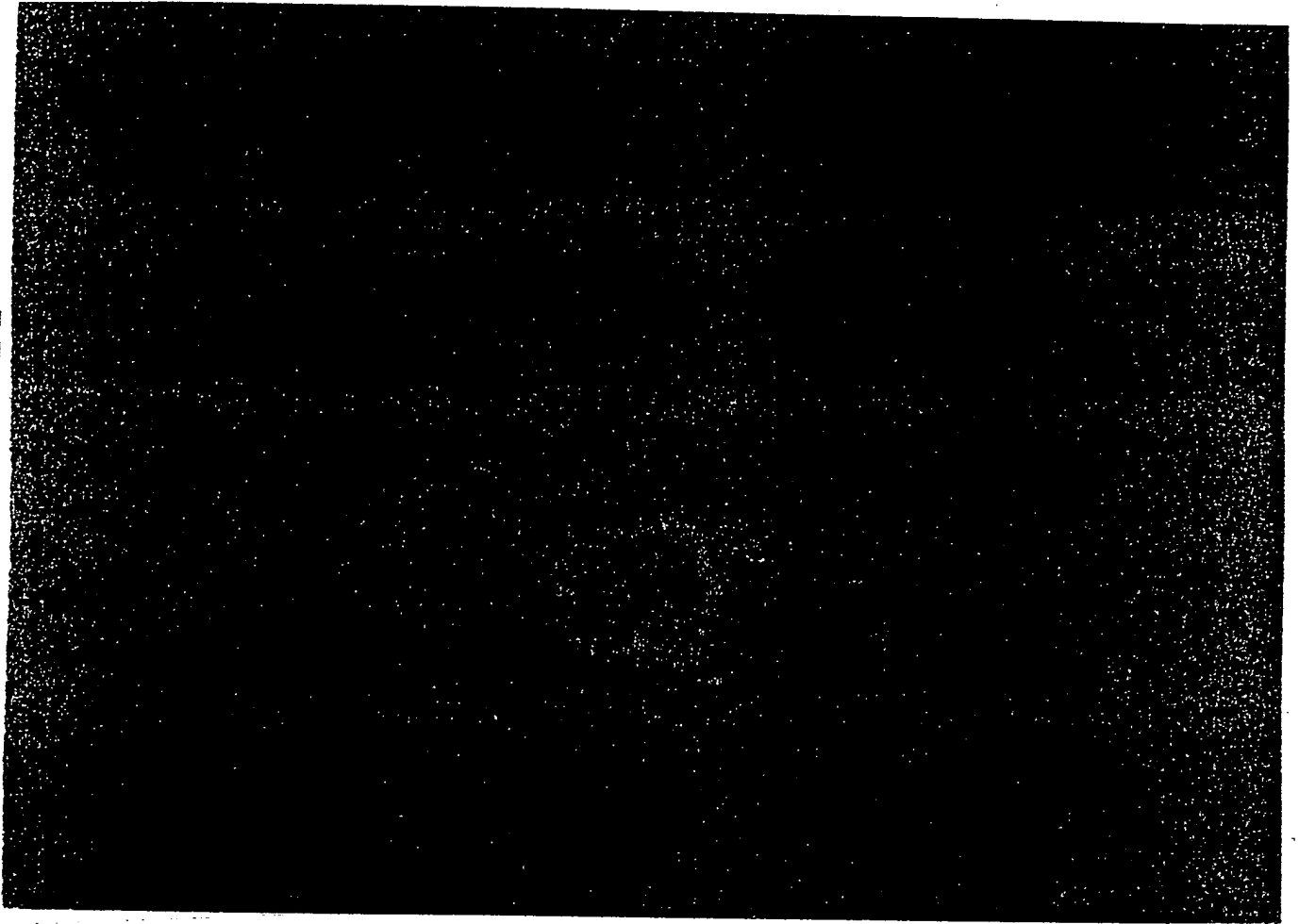


FIGURE 19

PSCA Immunostaining of Primary Tumors

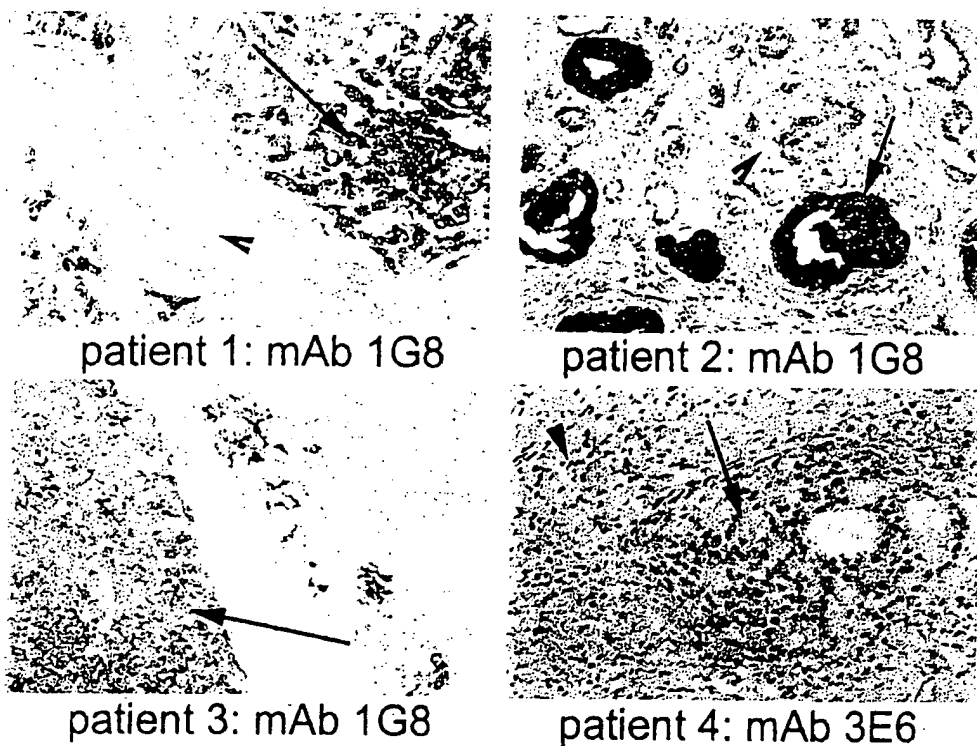


FIGURE 21



FIGURE 22



FIGURE 23

FIGURE 25

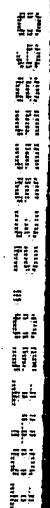
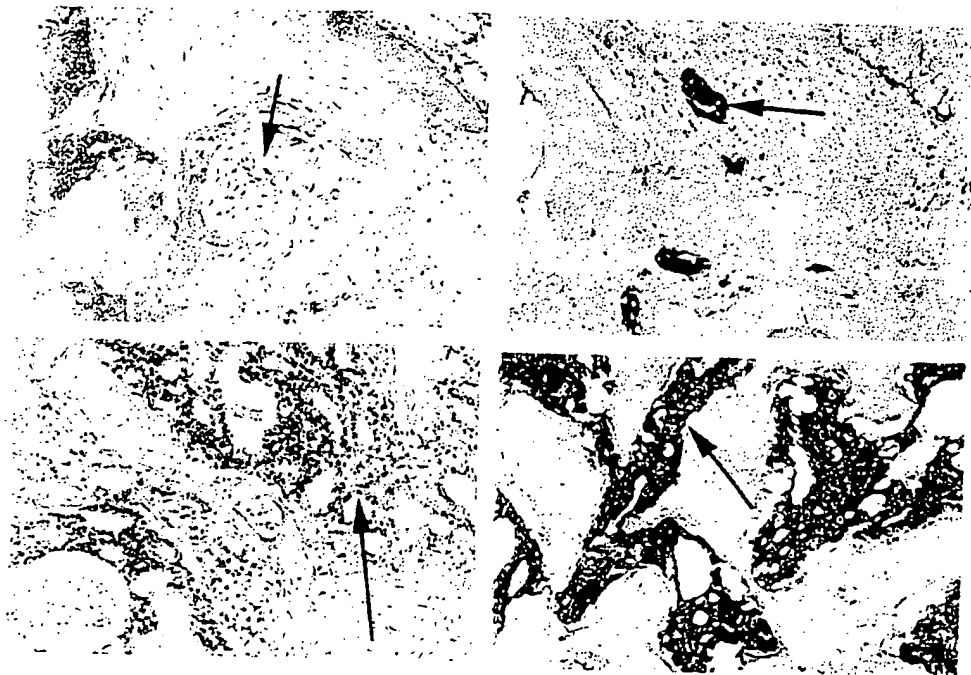


FIGURE 26

PSCA Immunostaining of Bony Metastases



Patient 5: H and E
and mAb 1G8

Patient 4: H and E
and mAb 3E6

FIGURE 28

This is a high-contrast, black and white image showing a dense, textured surface. The texture is grainy and irregular, with many small, light-colored specks and fibers visible against a dark background. In the center-right area, there is a darker, more solid-looking shape that appears to be a shadow or a different material, possibly a book cover or endpaper. The overall appearance is that of a close-up photograph of a rough, aged surface.

FIGURE 29

TOP SECRET

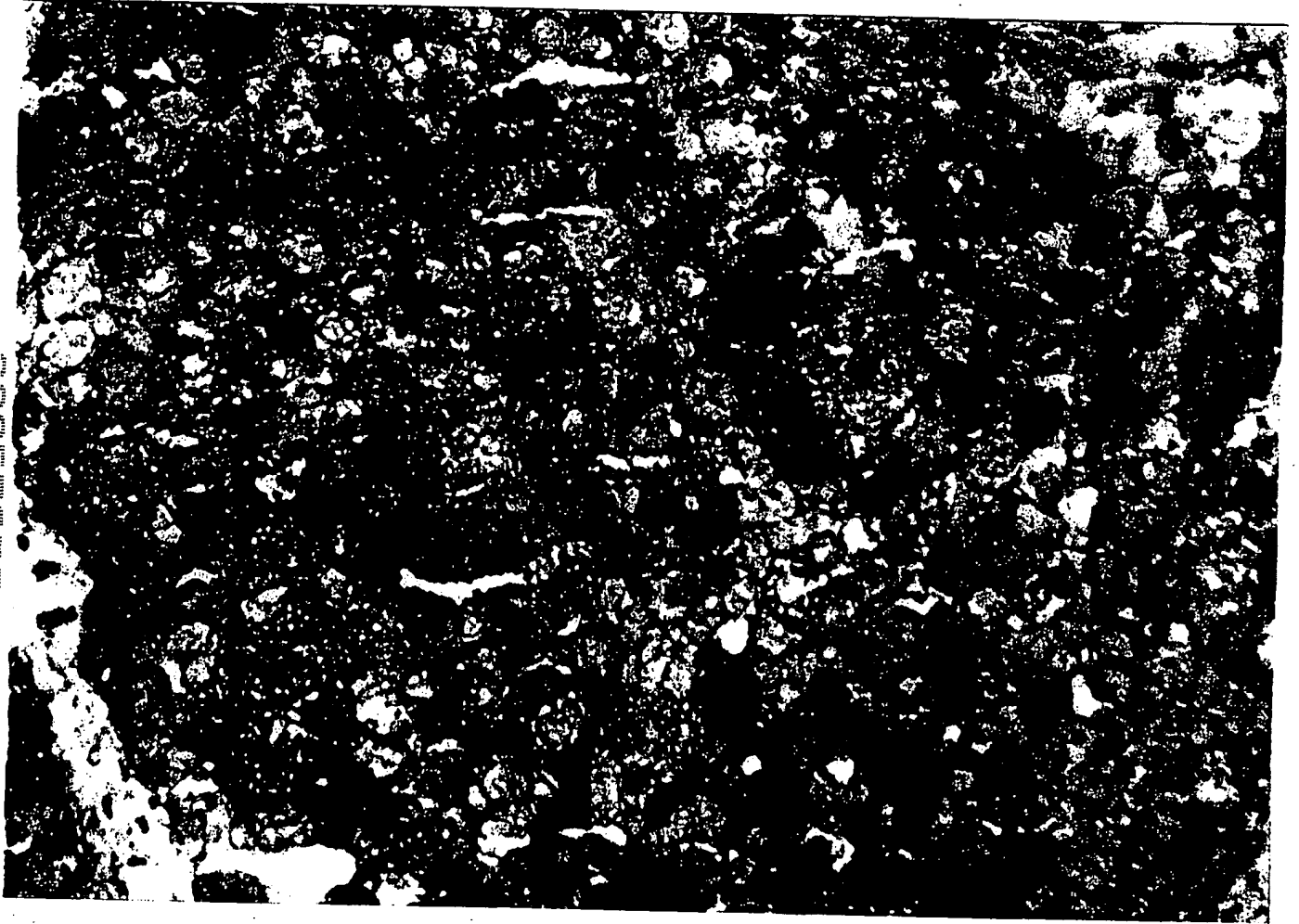


FIGURE 30

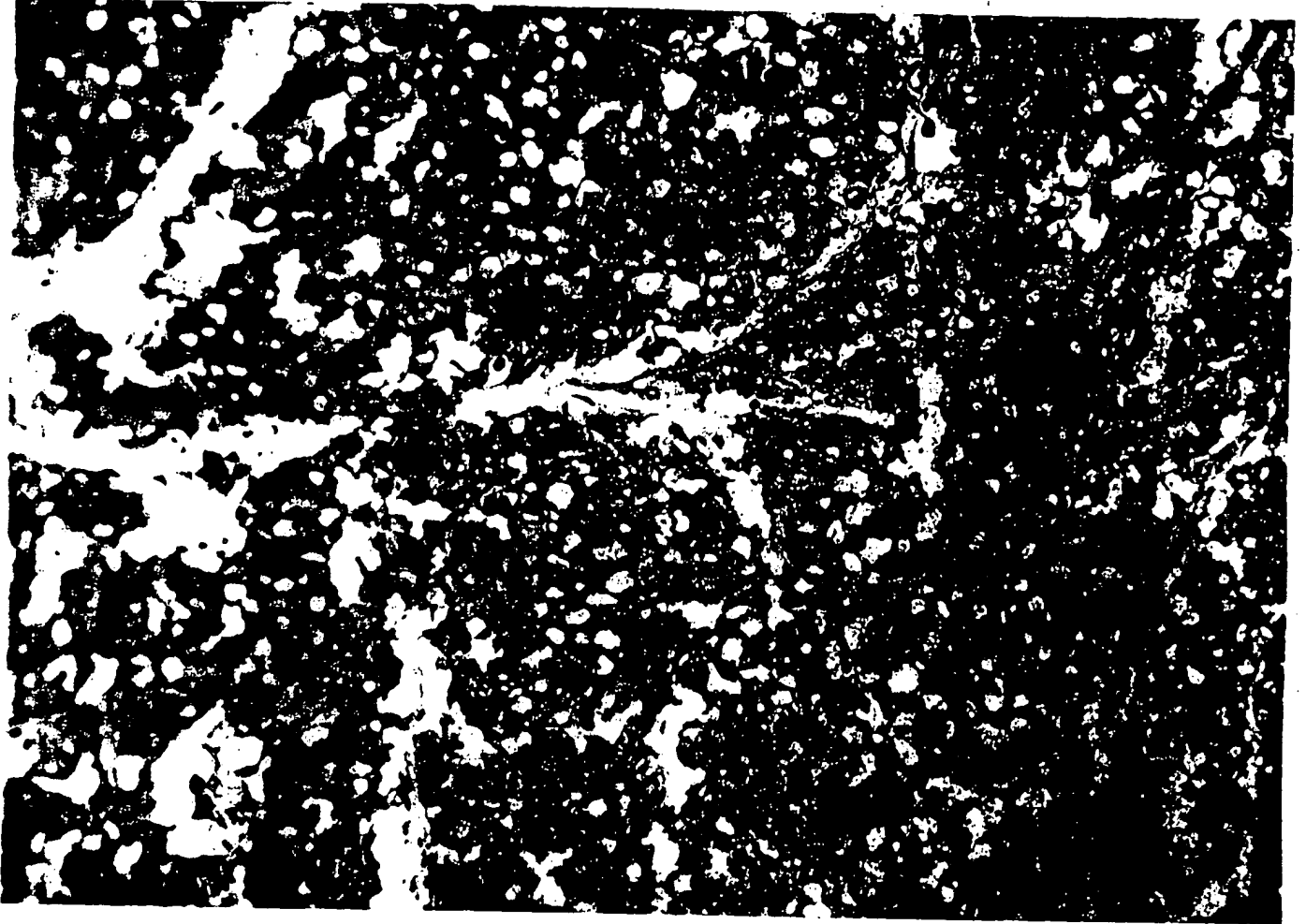


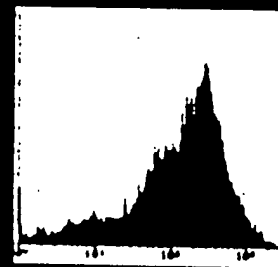
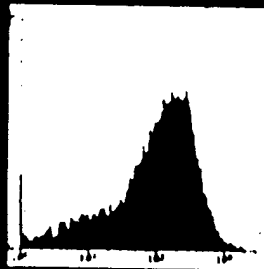
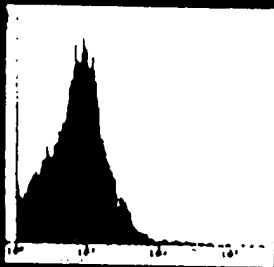
FIGURE 31

PSCA Expression in LAPC-9 Xenograft by FACS

Secondary Antibody

1G8

2H9



4A10

3C5

3E6

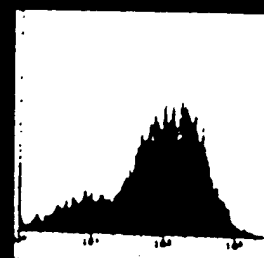
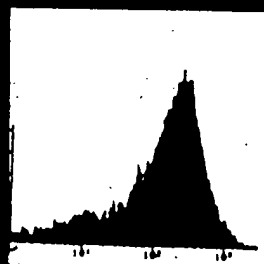
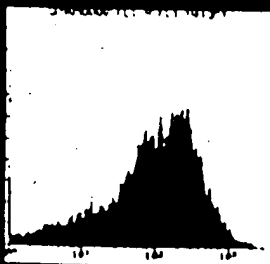


FIGURE 33

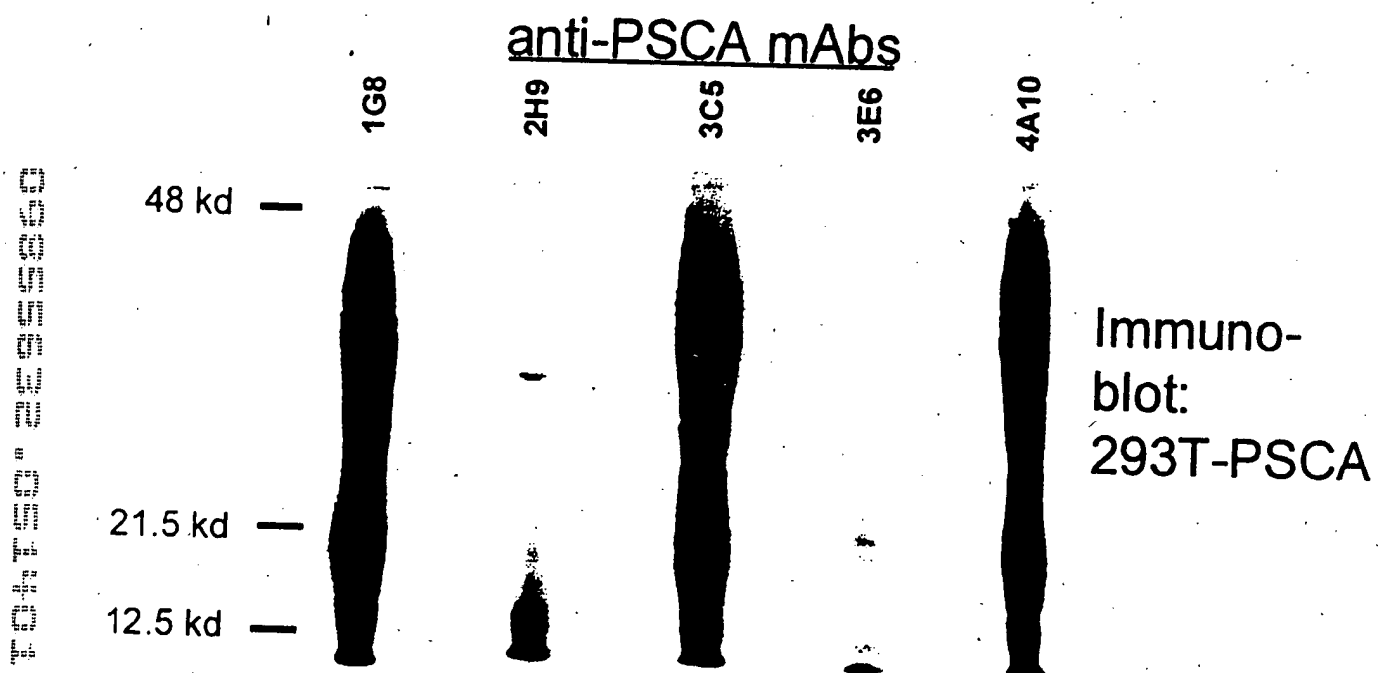


FIGURE 34

Immunofluorescent Staining of LNCaP-PSCA Cells

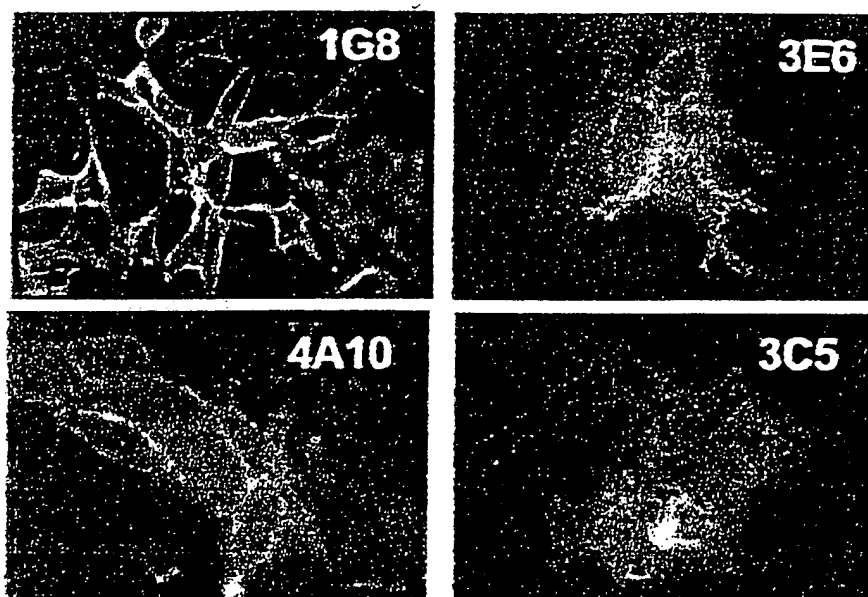


FIGURE 35

FIGURE 36

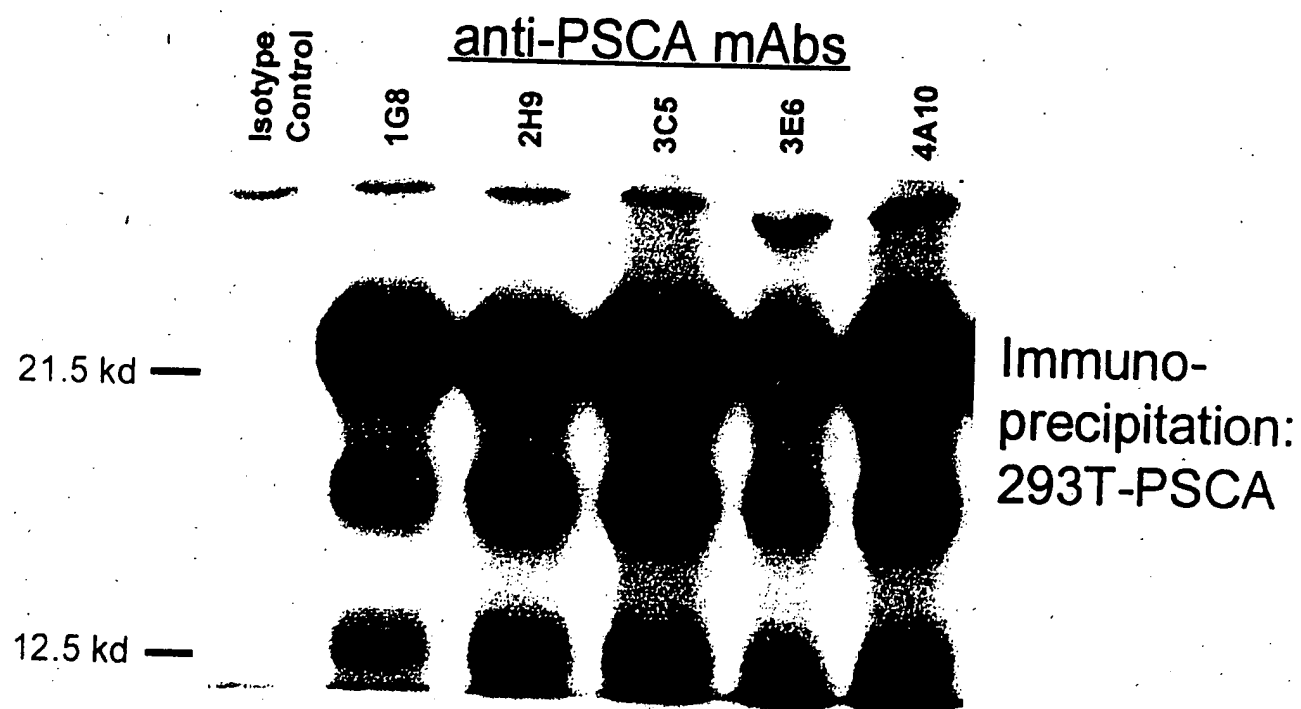


FIGURE 37

Immunohistochemical Staining of Normal Prostate

Normal: Isotype Control



Normal: PSCA mAb 3E6



Normal: PSCA mAb 1G8



Atrophy: PSCA mAb 2H9

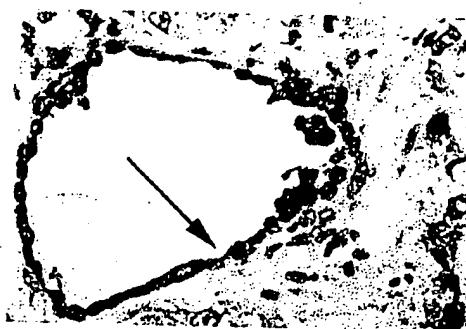
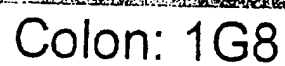
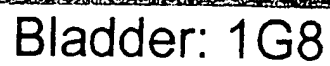


FIGURE 38

[illegible]

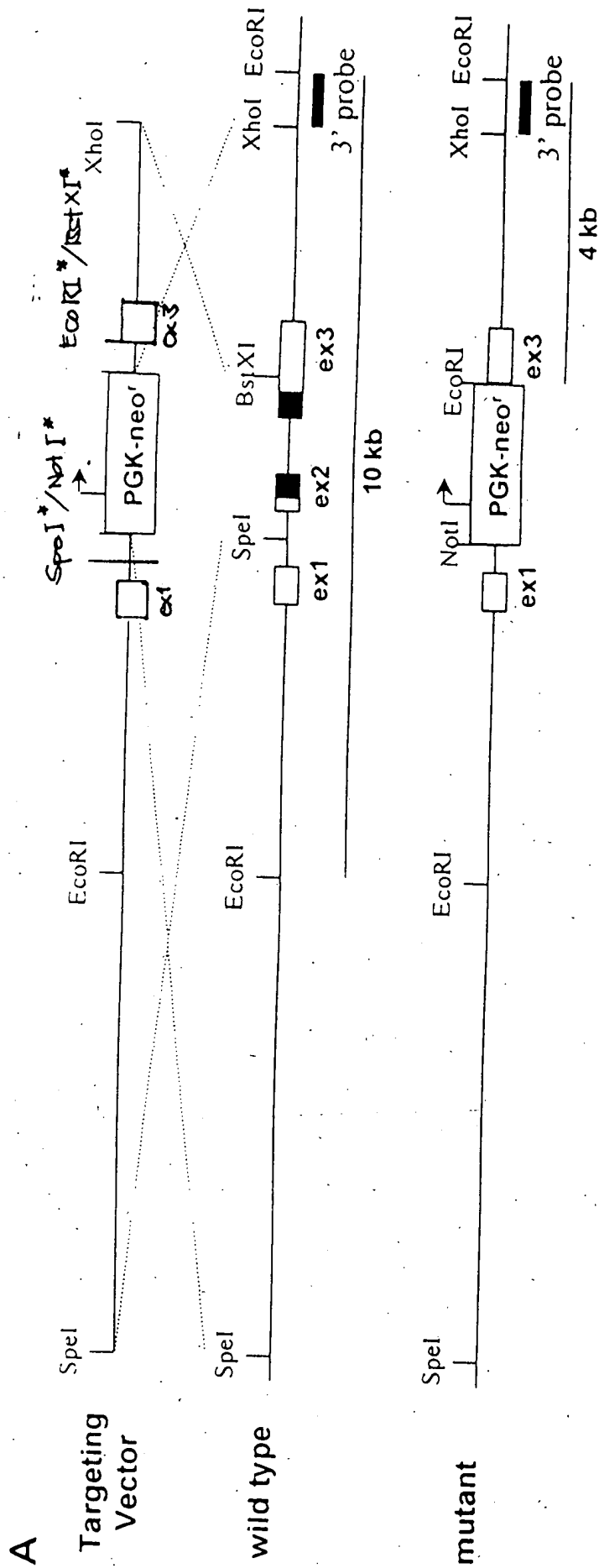
Prostate	Prostate	Prostate	Kidney	Kidney	Kidney	Bladder	Bladder	Bladder	LAPC 9
									P
									A

PSCA

Actin

FIGURE 39

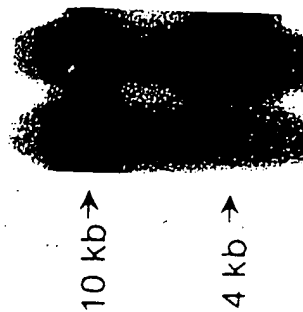
Targeting of Mouse PSCA Gene



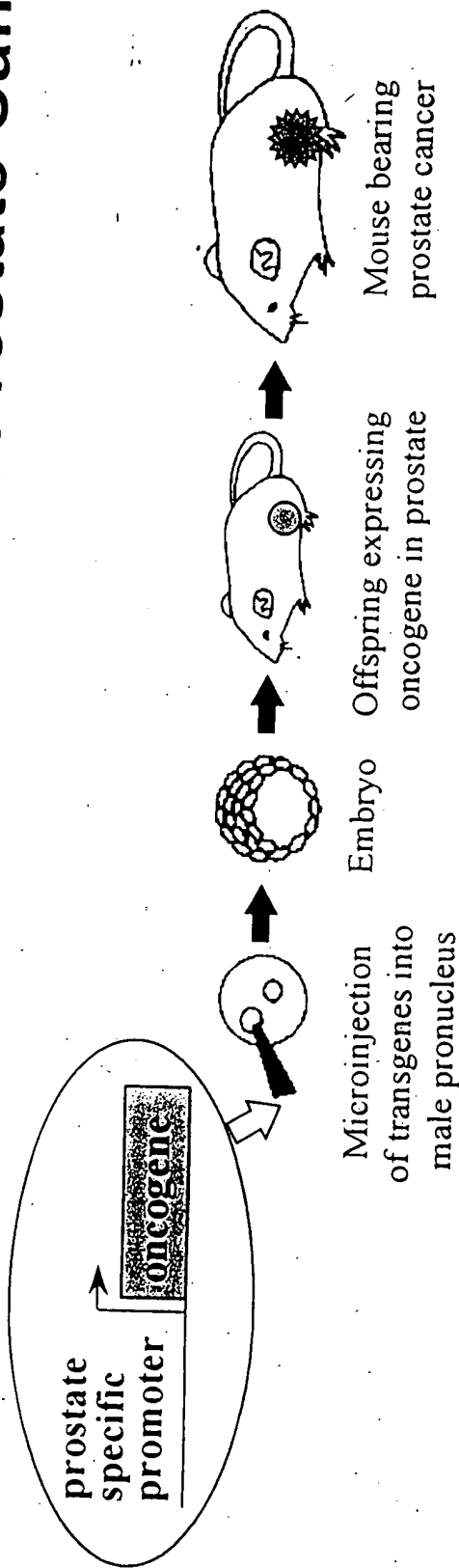
* ex 1, 2, and 3 are the exons of PSCA gene.
 * Black boxes of ex2 and ex3 encode PSCA mature protein sequences.
 * ES genomic DNA's were digested with EcoRI, followed by Southern hybridization using 3' probe.

B. Genomic Southern Analysis of ES Cells

+/+ +/-



Transgenic Mouse Models of Prostate Cancer



Transgene	Target tissues	Characteristics
C3(1) (-3 kb)/ SV40 large+small, T <i>Maroulakou et al.</i> 1994 <i>PNAS</i>	prostate (secretory cells) urethral, mammary and sweat gland	Low-grade PIN 8-12 wks High-grade PIN 8-12 wks Invasive carcinoma 28 wks No metastases
Probasin (-426 bp)/ SV40 large+small, T <i>Greenberg et al.</i> 1995 <i>PNAS</i>	prostate (secretory cells)	Low-grade PIN 5-8 wks High-grade PIN 8-12 wks Invasive carcinoma 12 wks Metastases in lymph node, lung, liver and bone
Cryptdin2 (-6.5 kb)/ SV40 large+small, T <i>Garabedian et al.</i> 1998 <i>PNAS</i>	prostate (neuroendocrine cells) small intestine	Low-grade PIN 8-12 wks High-grade PIN 8-12 wks Invasive carcinoma 16 wks Metastases in lymph node, lung, liver and bone

Reporter Gene Constructs for Transfection Assay

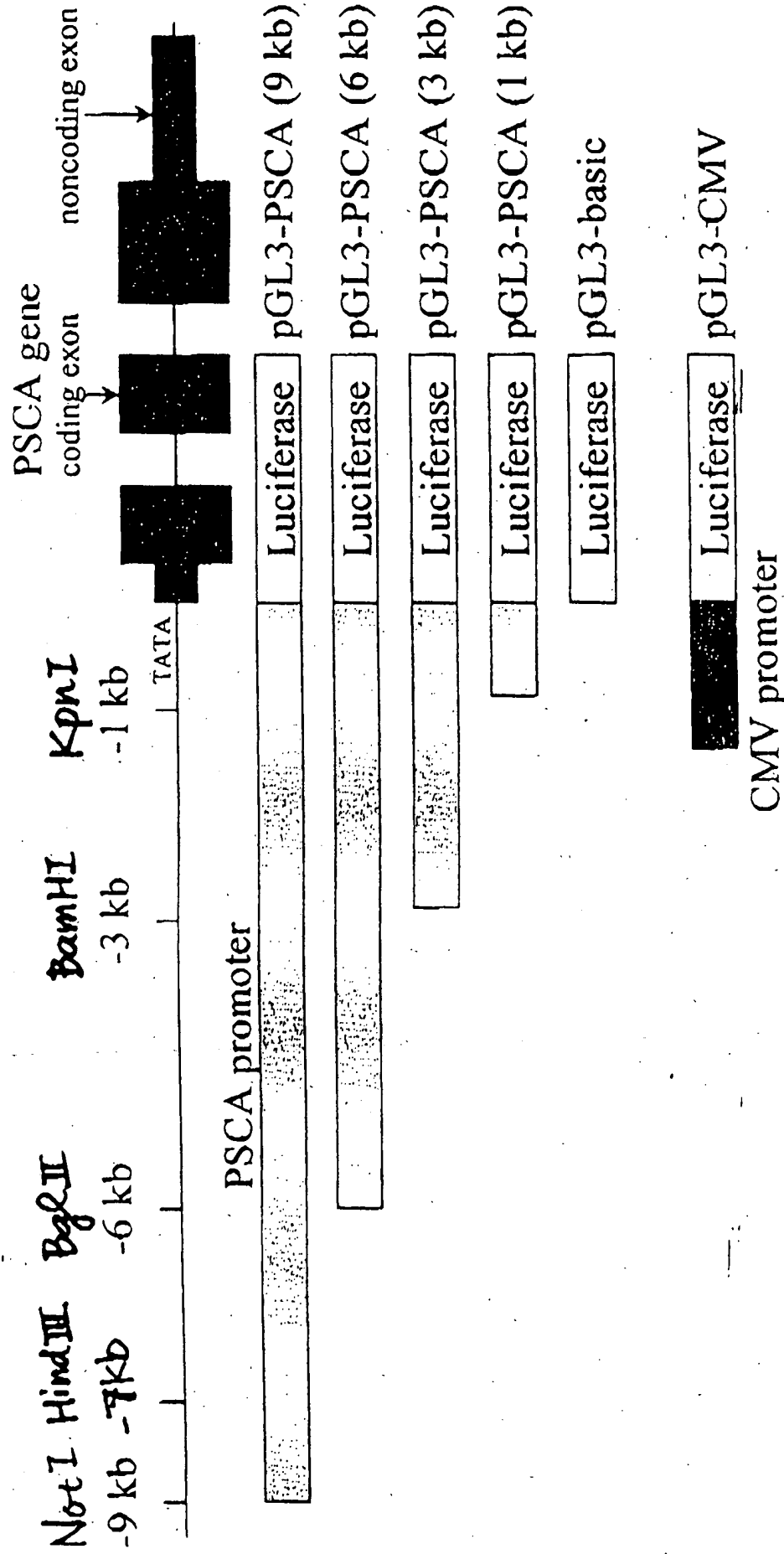


FIGURE 42

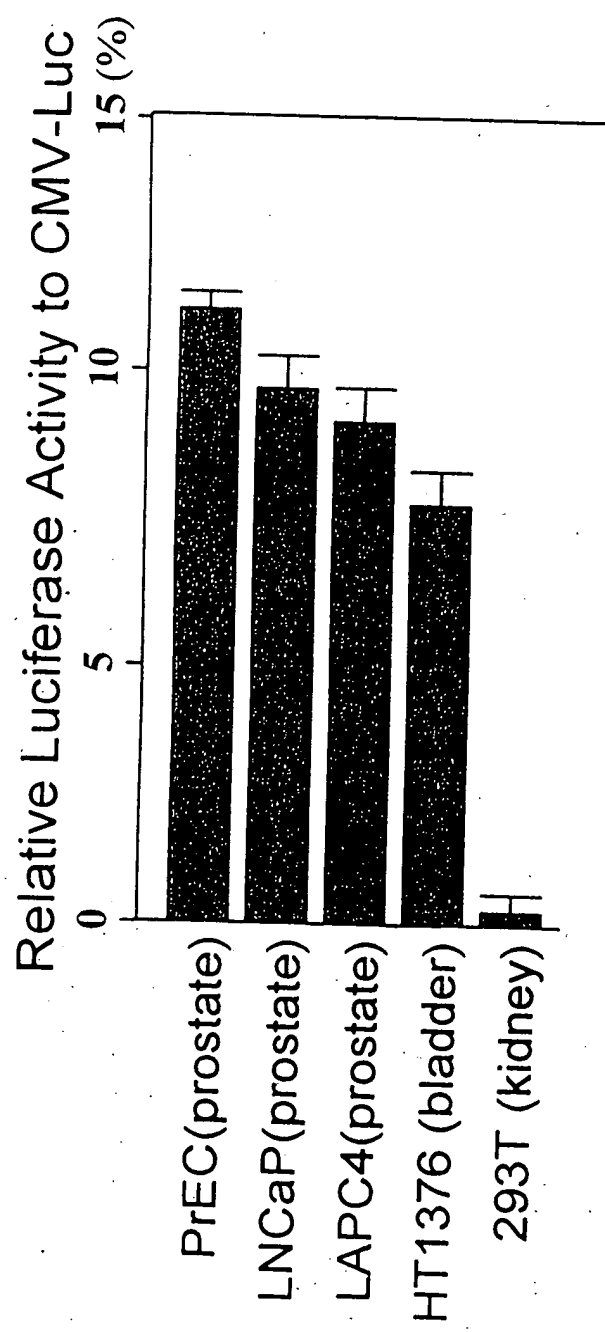


FIGURE 43

Identification of Prostate-Specific Elements Within PSCA Promoter Sequences

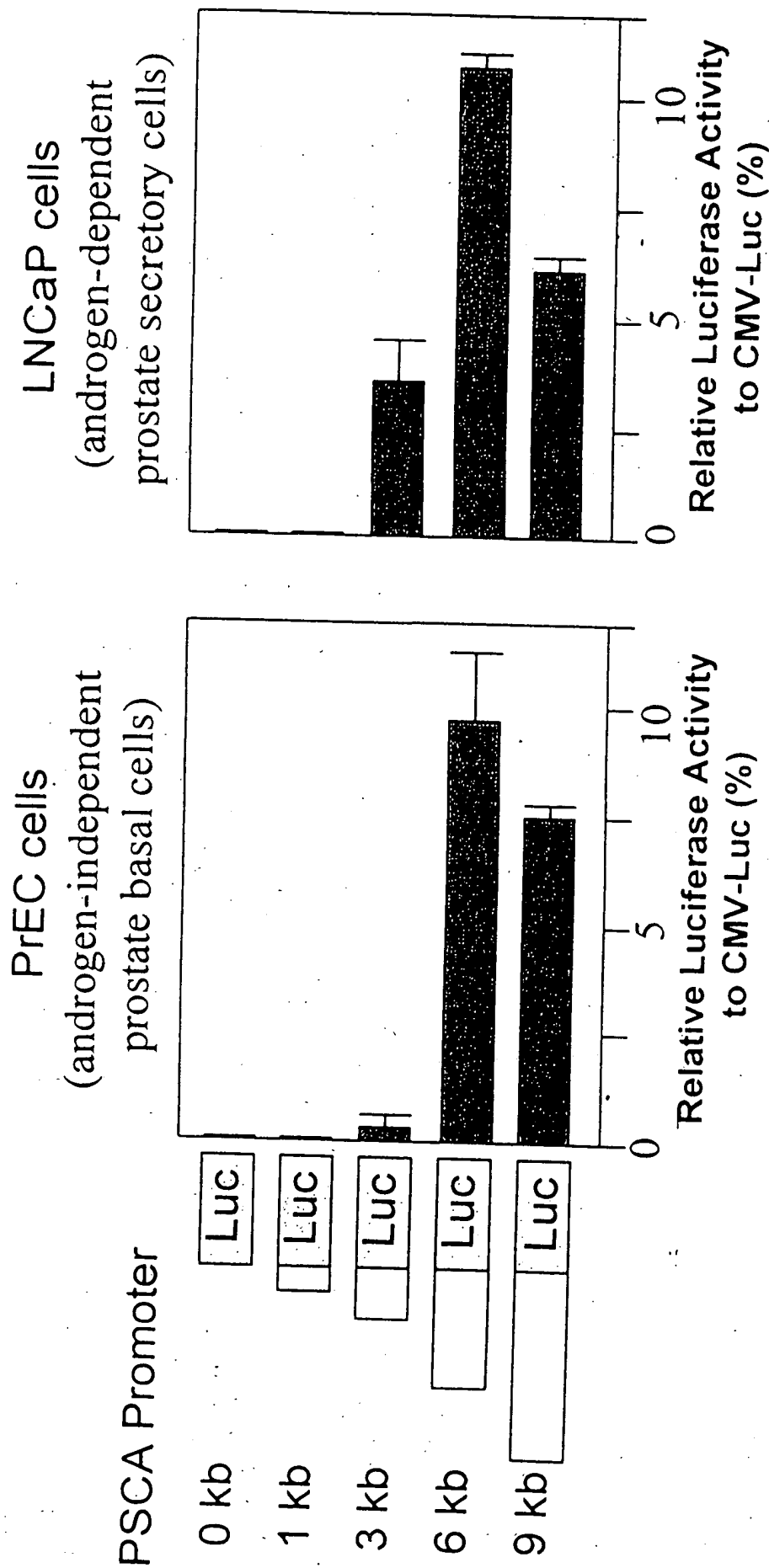


FIGURE 44

Whole-mount green fluorescence image
Transgenic Non-transgenic

Negative tissues

Stomach

Small intestine

Colon

Seminal Vesicle

Urethra

Testis

Liver

Kidney

Lung

Brain

Heart

Skeletal muscle

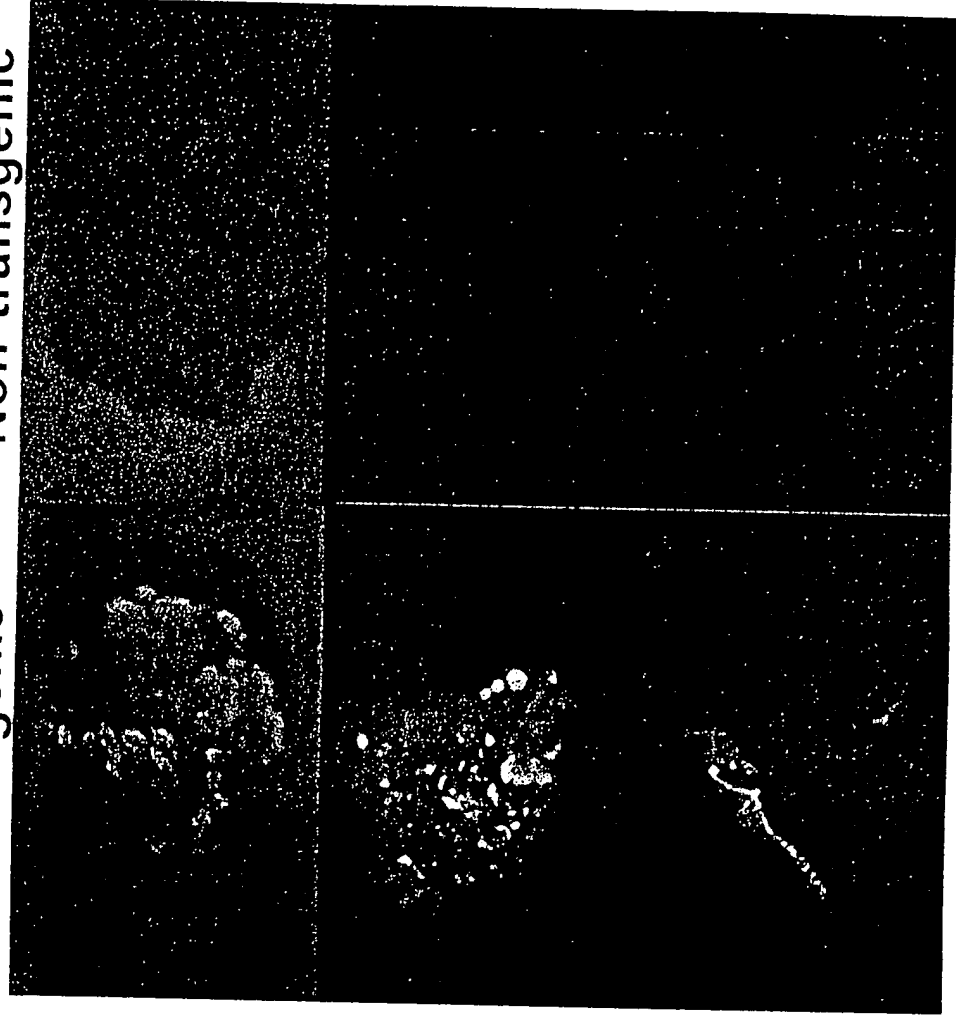
Ovary

Uterus

Prostate
(A25-106-2)

Bladder
(A25-104)

Skin
(A25-106-2)



044000 223333

HUMAN
Spleen
Thymus
Prostate
Testis
Ovary
S. int.
Colon
PBL

Heart
Brain
Placenta
Lung
Liver
Muscle
Kidney
Panc.

hPSCA →

Northern Analysis

MOUSE

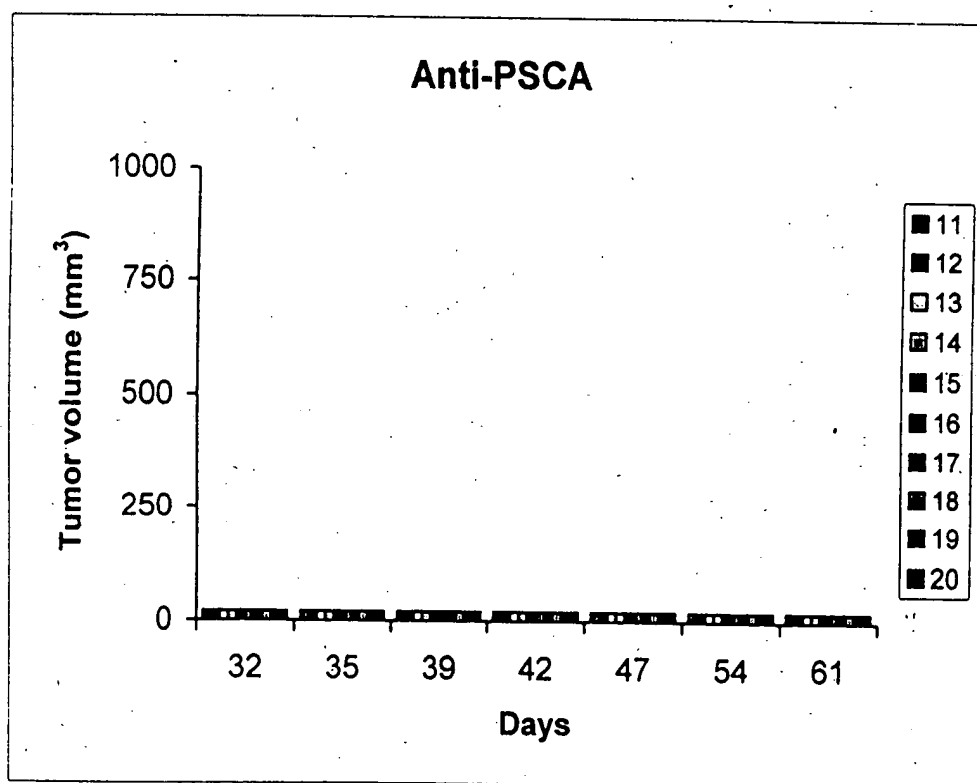
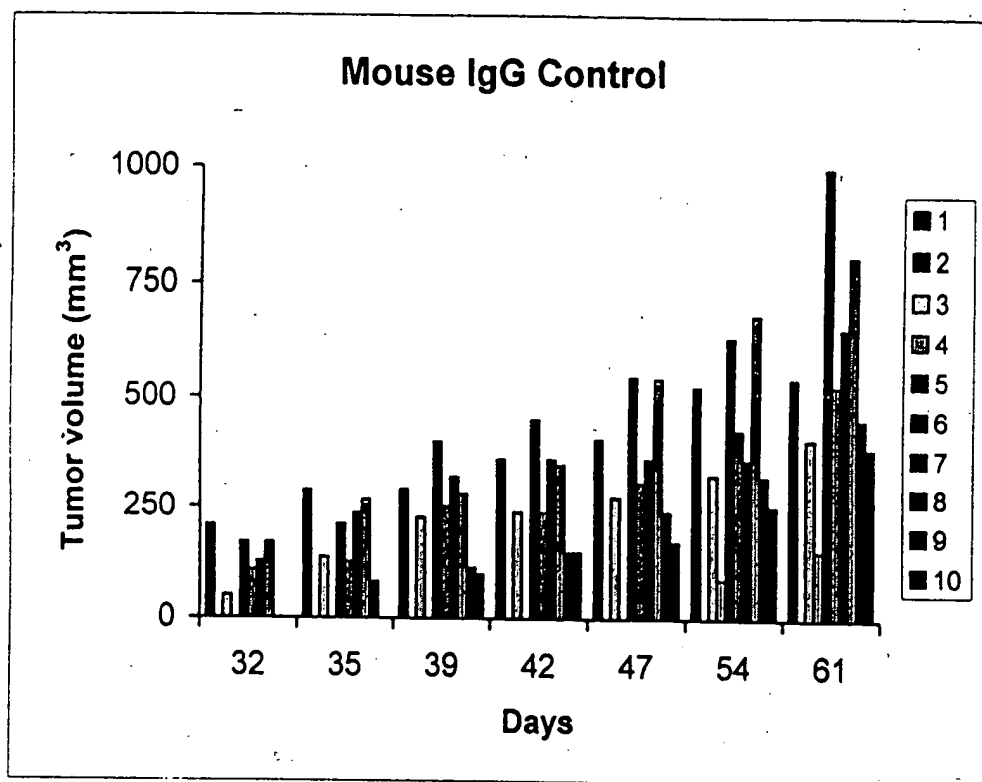
Ant. prostate
Dorsol. prostate
Ventral prostate
Bladder
Seminal vesicle
Urethra
Testis
Kidney
Esophagus
Body of stomach
Pyloric stomach
Duodenum
Small intestine
Colon
Salivary gland
Spleen
Thymus
Bone marrow
Skeletal muscle
Heart
Brain
Eye
Lung
Liver
Skin

mPSCA →

mG3PDH →

RT-PCR

FIGURE 47

[illegible]

A

FIG. 49

Epitope recognized (OD 450 nm)

mAb	Isotype	F (18-98)	N (2-50)	M (46-109)	C (85-123)
1G8	IgG1 k	1.485	0.004	1.273	0.003
2A2	IgG2a k	0.973	0.631	0.023	0.010
2H9	IgG1 k	1.069	1.026	0.002	0.001
3C5	IgG2a k	1.916	1.709	0.006	0.002
3E6	IgG3 k	1.609	0.036	1.133	2.118
3G3	IgG2a k	2.805	1.731	0.004	0.000
4A10	IgG2a k	1.053	0.493	0.000	0.001

B

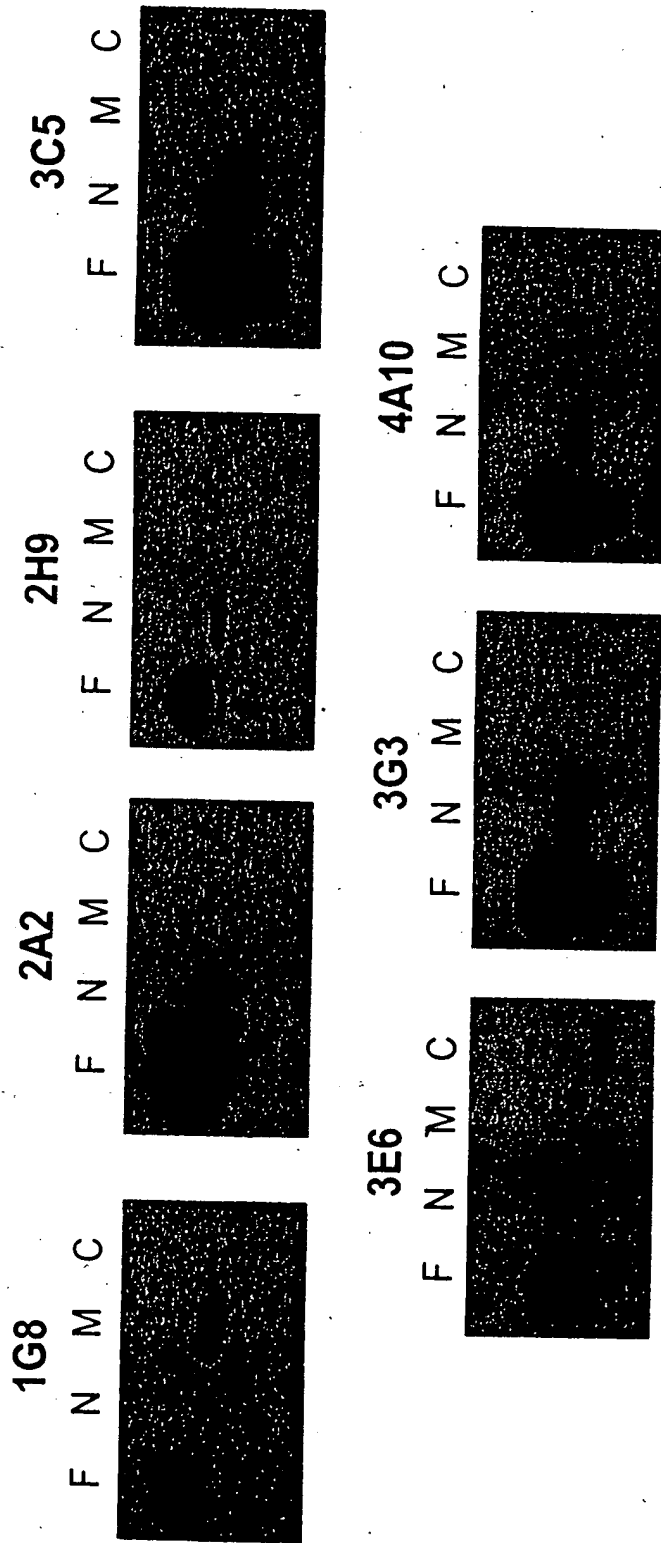
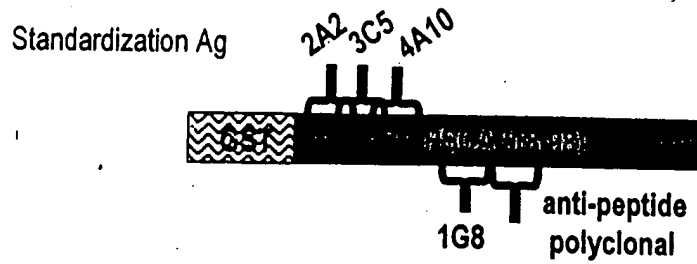
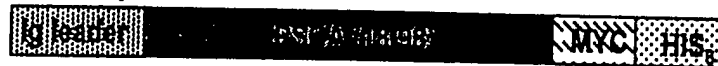


FIG. 50

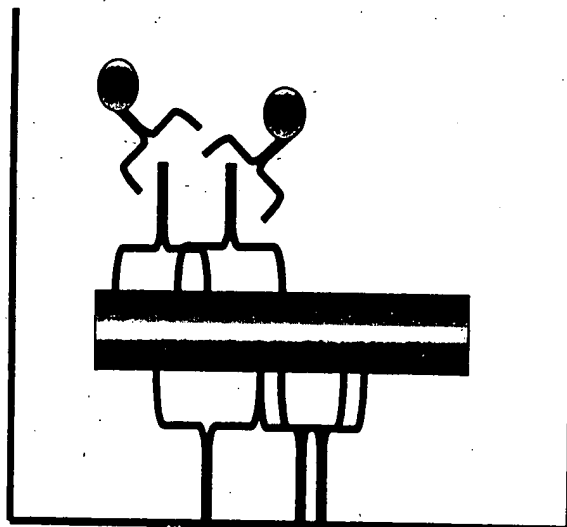
A



Engineered mammalian secreted form



B



Anti-IgG2a HRP

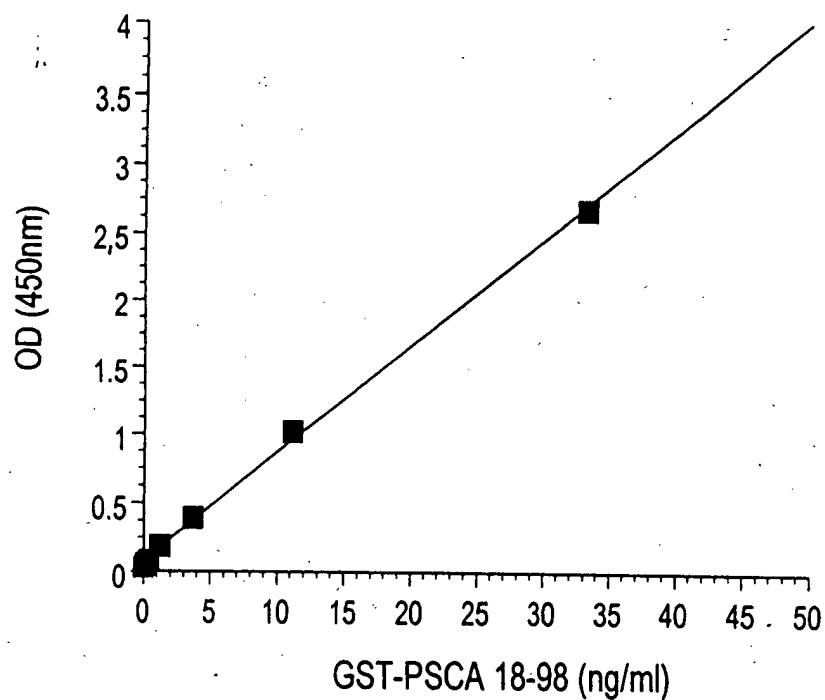
Anti-PSCA mAbs 3C5+4A10+2A2 (IgG2a)

PSCA

Affinity purified anti-peptide polyclonal
+ mAb 1G8 (IgG1)

FIG. 51

A



B

<u>Sample</u>	<u>OD+range (n=2)</u>	<u>ng/ml</u>
vector	0.005+0.001	ND
vector+hu serum	0.004+0.001	ND
secPSCA	2.695+0.031	32.92
secPSCA+hu serum	2.187+0.029	26.55

FIG. 52

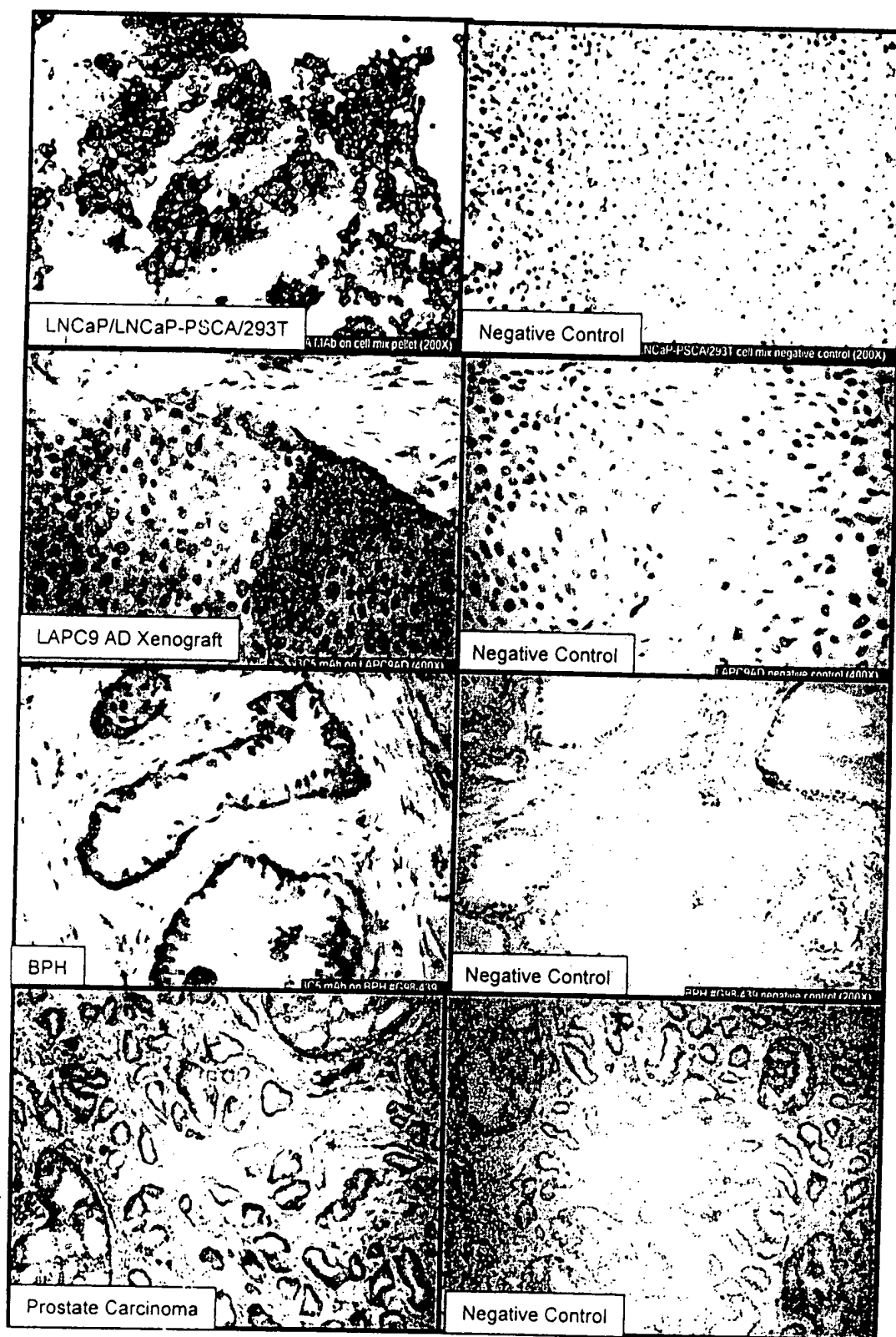


FIG. 53

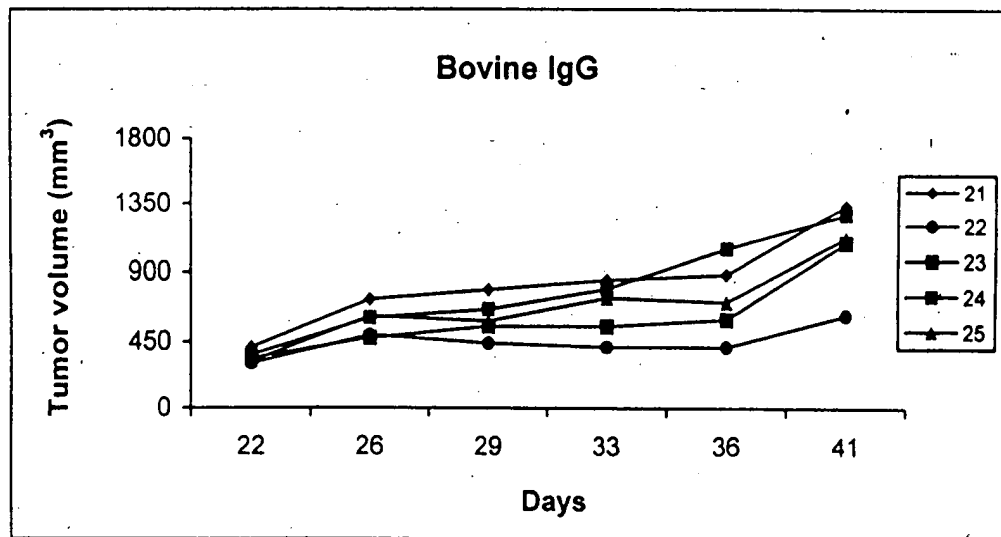
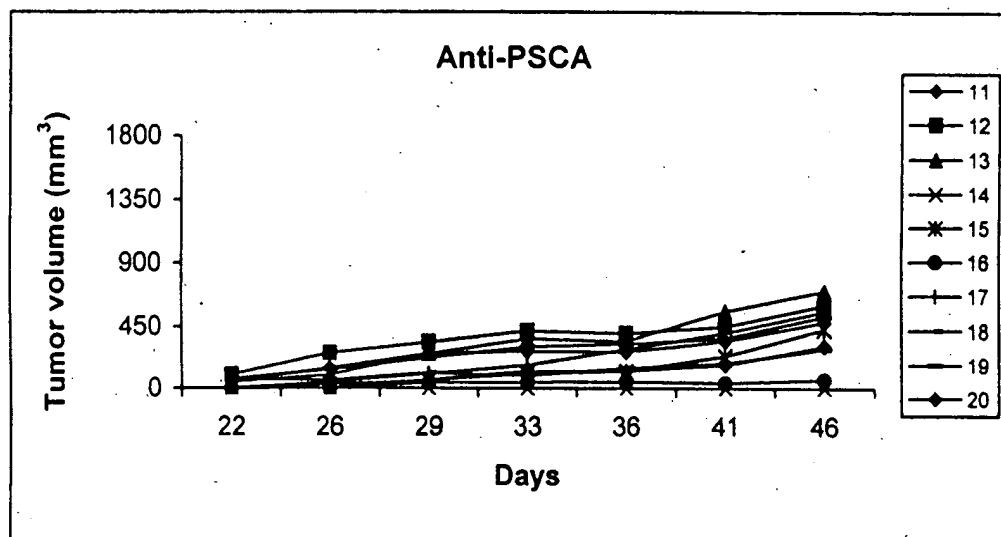
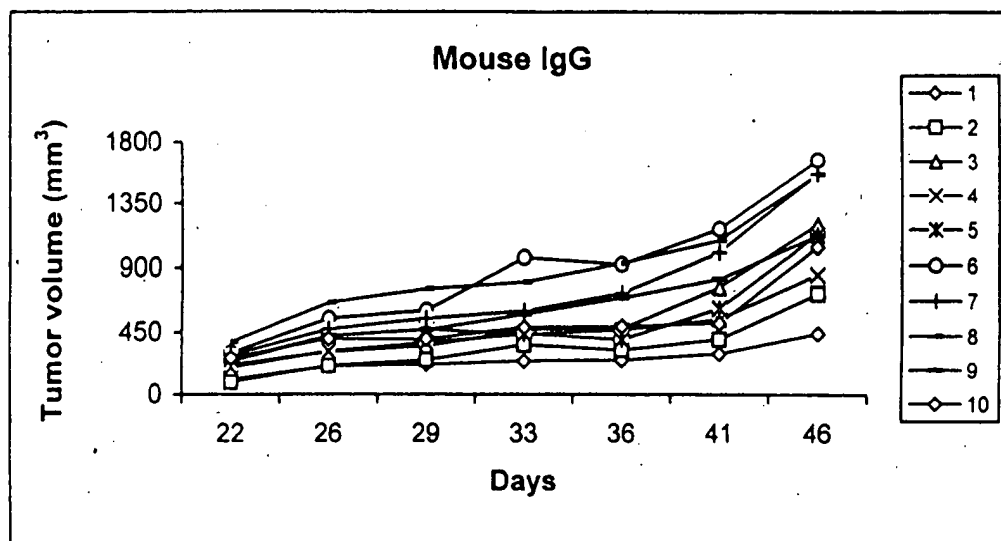


FIG. 54

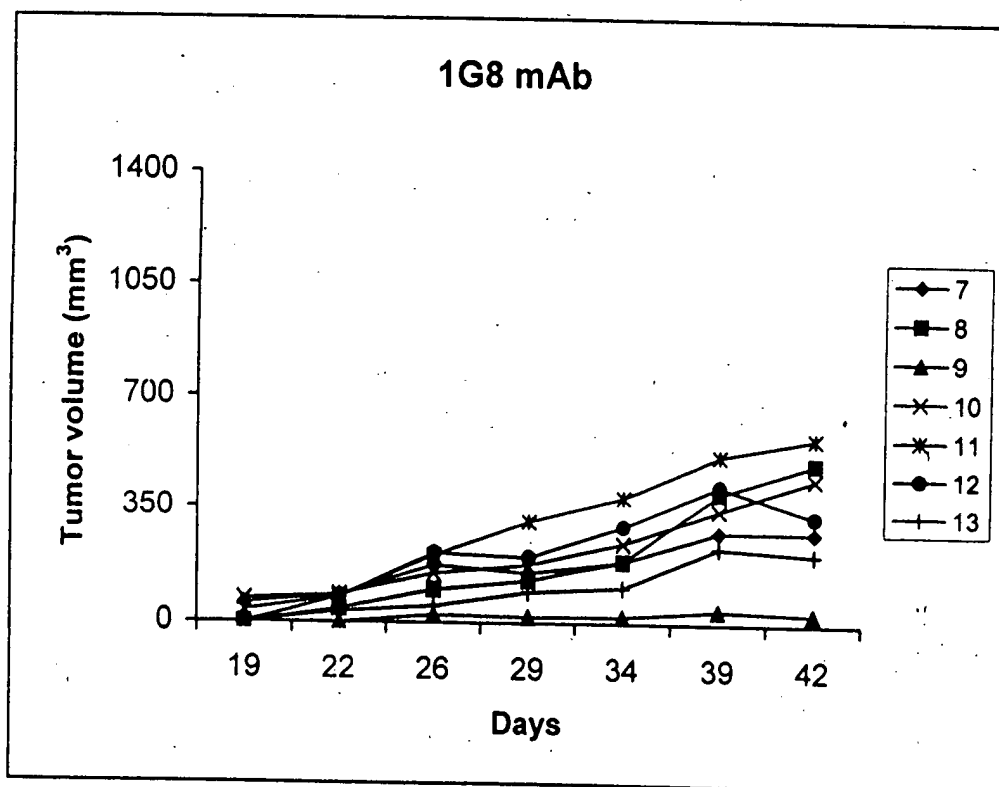
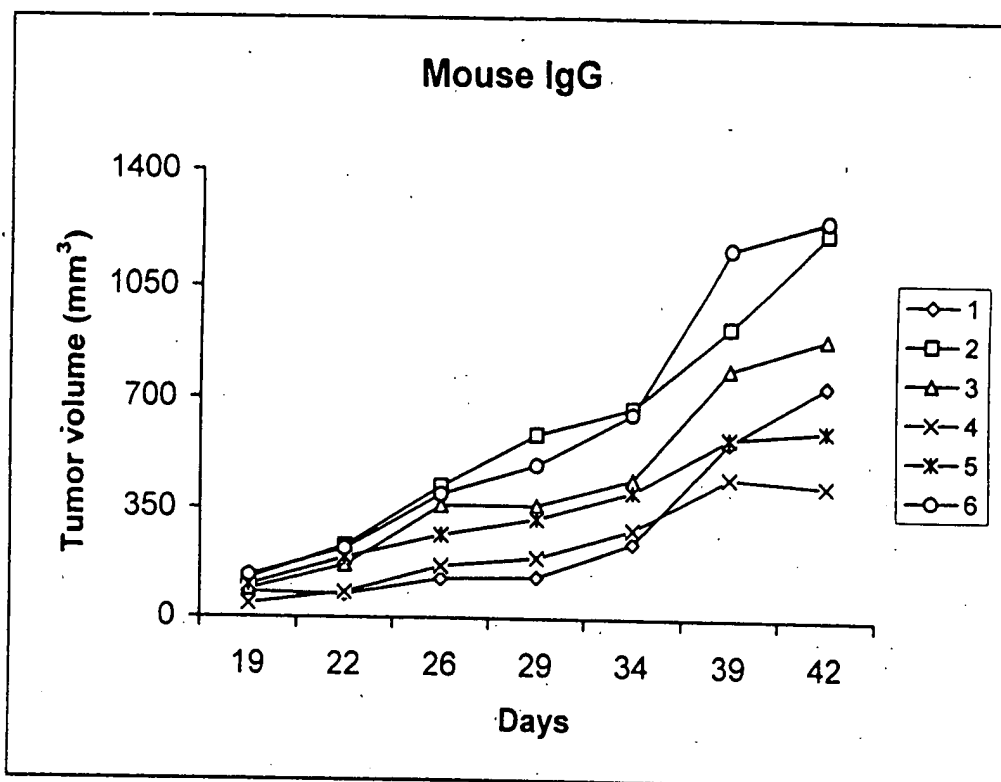


FIG. 55

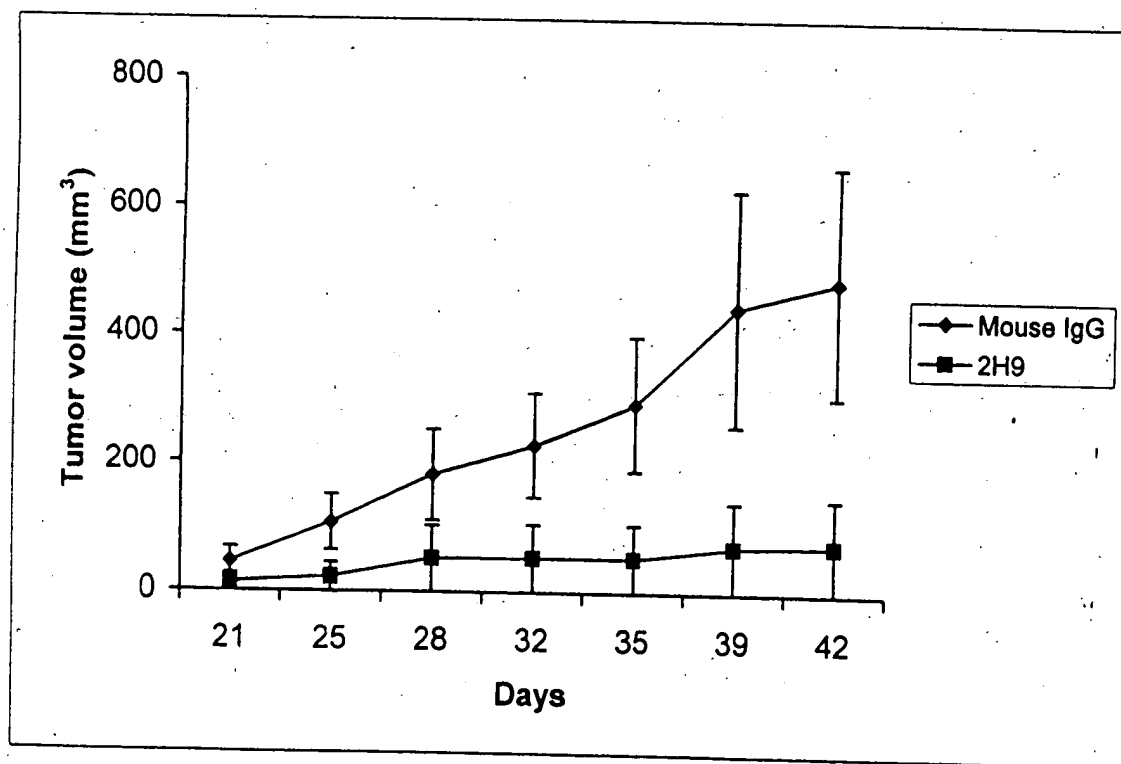
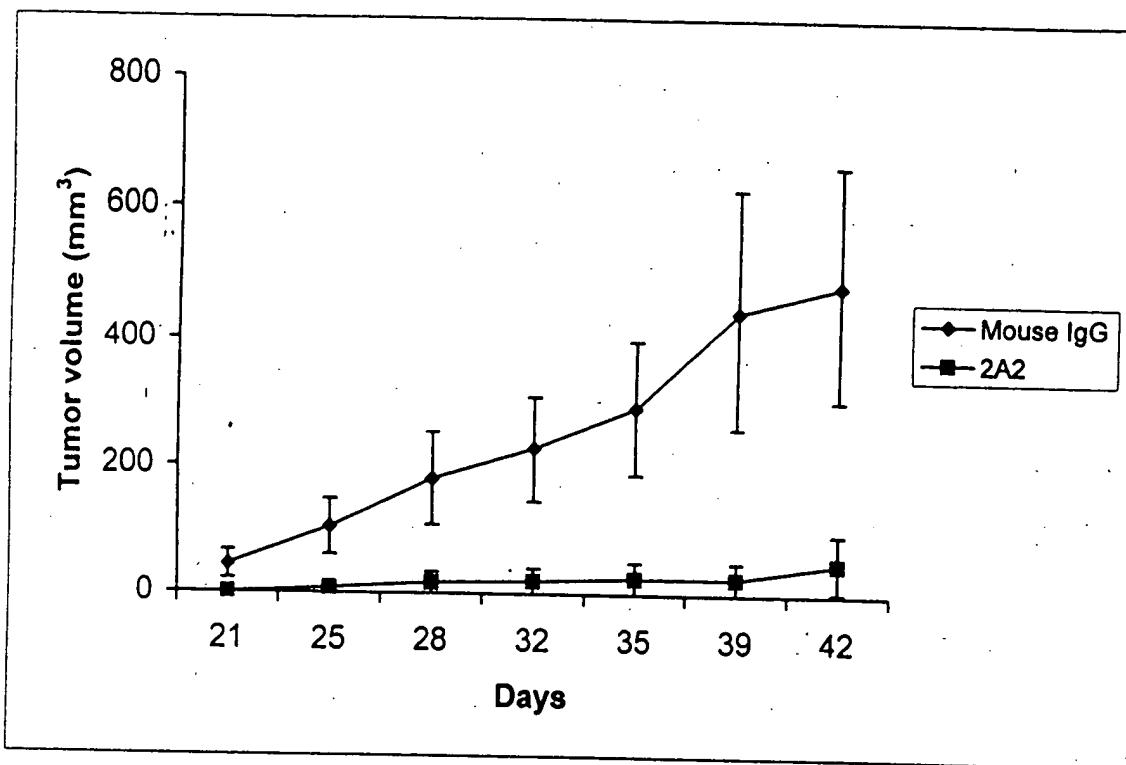


FIG. 56

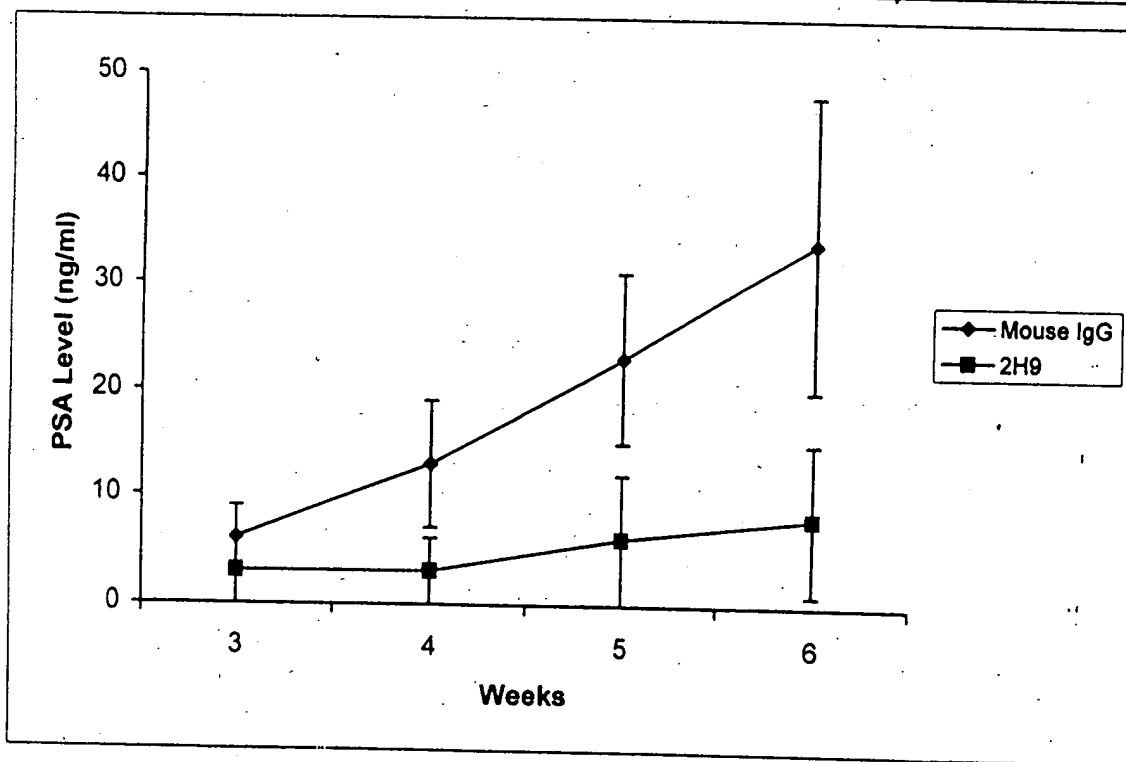
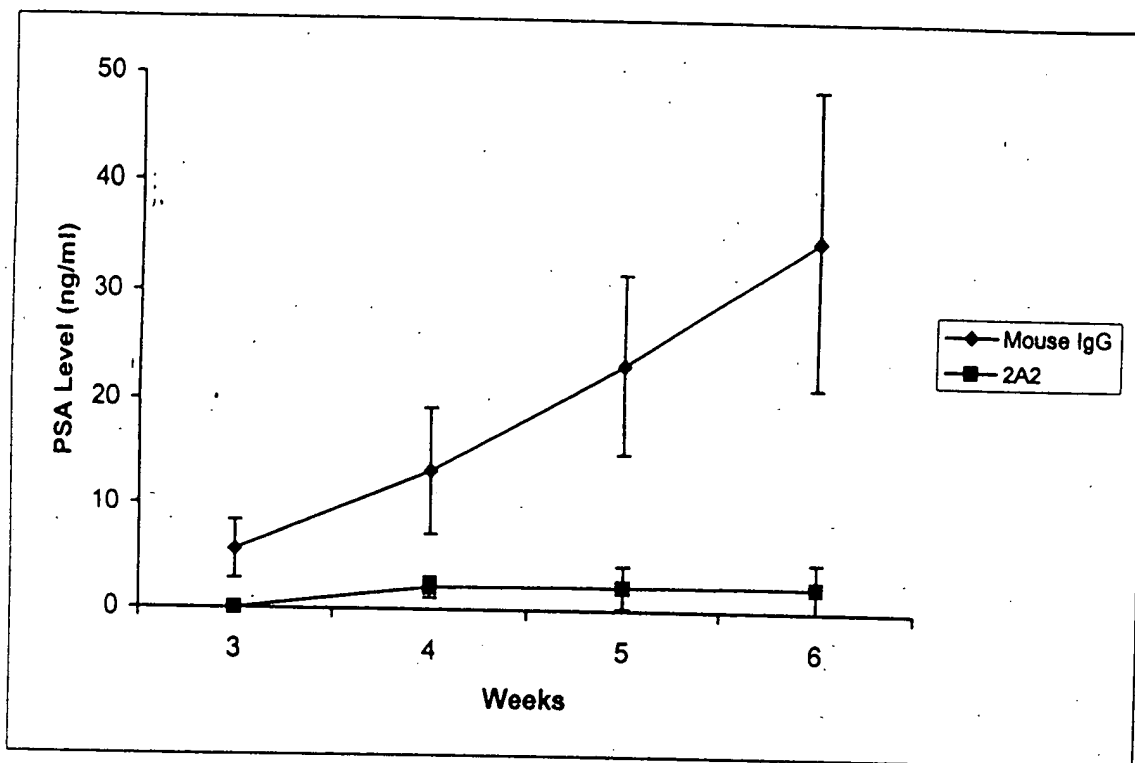


FIG. 57

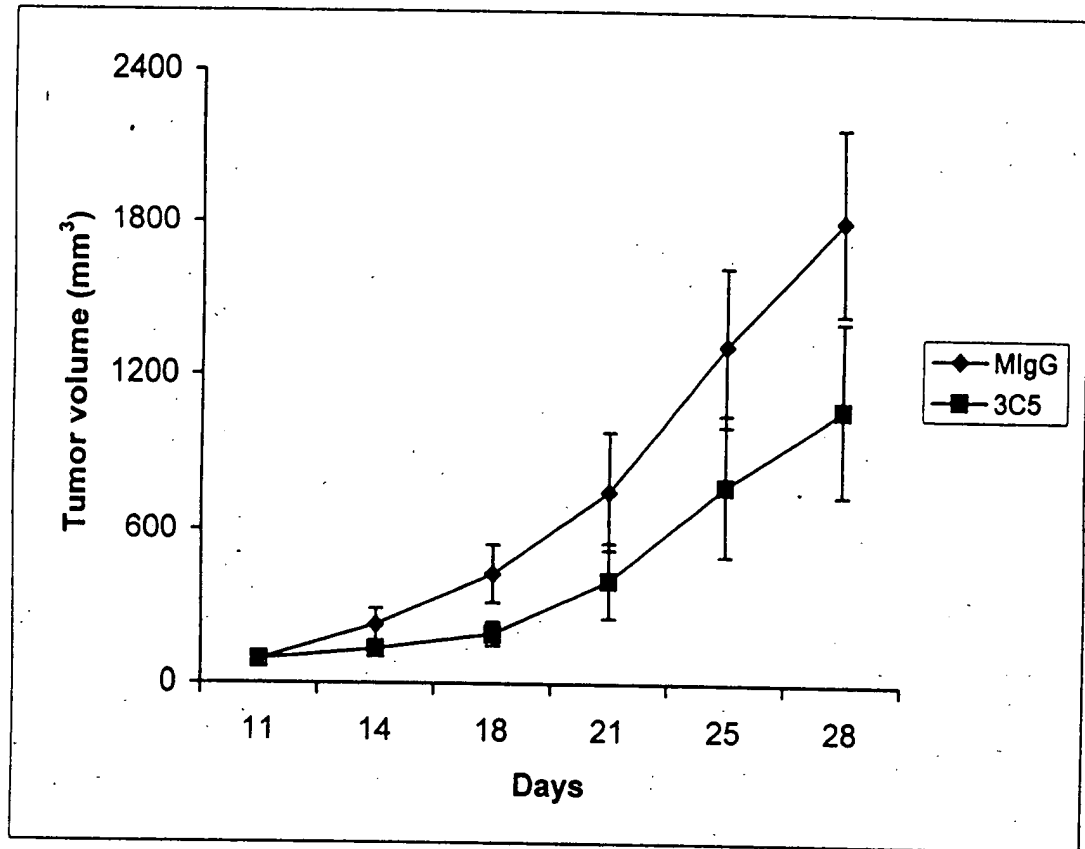


FIG. 58

TGCTTCTTCCTGATGGCAGTGGTTATAGGAGTCAATTCAGAGGTTTCAGCTGCAGCAGTCT 60
C F F L M A V V I G V N S E V Q L Q Q S 20

GGGGCAGAACTTGTGAGGTCAGGGGCCTCAGTCAAGTTGTCCTGCACAGCTTCTGGCTTC 120
G A E L V R S G A S V K L S C T A S G F 40

———— CDR1 ————
AACATTAAAGACTACTATATACACTGGGTGAATCAGAGGCCTGACCAGGGCCTGGAGTGG 180
N I K D Y Y I H W V N Q R P D Q G L E W 60

———— CDR2 ————
ATTGGATGGATTGATCCTGAGAATGGTGACACTGAATTTGTCCCGAAGTTCCAGGGCAAG 240
I G W I D P E N G D T E F V P K F Q G K 80

GCCACTATGACTGCAGACATTTTCTCCAACACAGCCTACCTGCACCTCAGCAGCCTGACA 300
A T M T A D I F S N T A Y L H L S S L T 100

———— CDR3 ————
TCTGAAGACACTGCCGTCTATTACTGTAAAACGGGGGGTTTCTGGGGCCAAGGGACTCTG 360
S E D T A V Y Y C K T G G F W G Q G T L 120

GTCACTGTCTCTGCAGCCAAAACGACACCCCCATCTGTCTATCCACTG
V T V S A A K T T P P S V Y P L

FIG. 59

TTGGTAGCAACAGCCTCAGATGTCCACTCCCAGGTCCAAGTGCAGCAACCTGGGTCTGAA 60
L V A T A S D V H S Q V Q L Q Q P G S E 20

CTGGTGAGGCCTGGAACCTCAGTGAAGCTGTCCTGCAAGGCTTCTGGCTATACATTCTCC 120
L V R P G T S V K L S C K A S G Y T F S 40
CDR1

AGCTACTGGATGCACTGGGTGAAGCAGAGGCCTGGACAAGGCCTTGAGTGGATTGGAAAT 180
S Y W M H W V K Q R P G Q G L E W I G N 60

ATTGACCCTGGTAGTGGTTACACTAACTACGCTGAGAACCTCAAGACCAAGGCCACACTG 240
I D P G S G Y T N Y A E N L K T K A T L 80
CDR2

ACTGTAGACACATCCTCCAGCACAGCCTACATGCAGCTCAGCAGCCTGACATCTGAGGAC 300
T V D T S S S T A Y M Q L S S L T S E D 100

TCTGCAGTCTATTACTGTACAAGCCGATCTACTATGATTACGACGGGATTGCTTACTGG 360
S A V Y Y C T S R S T M I T T G F A Y W 120
CDR3

GGCCAAGGGACTCTGGTCACTGTCTCTGCAGCTACAACAACAGCCCCATCTGTCTATCCA 420
G Q G T L V T V S A A T T T A P S V Y P 160

CTGGCC
L A

FIG. 60

AATGACTTCGGGTTGAGCTGGGTTTTTATTATTGTTCTTTTAAAGGGGTCCGGAGTGAA 60
N D F G L S W V F I I V L L K G V R S E 20

GTGAGGCTTGAGGAGTCTGGAGGAGGCTGGGTGCAACCTGGAGGATCCATGAAACTCTCC 120
V R L E E S G G G W V Q P G G S M K L S 40

TGTGTAGCCTCTGGATTTACTTTTCAGTAATTACTGGATGACTTGGGTCCGCCAGTCTCCA 180
C V A S G F T F S N Y W M T W V R Q S P 60
CDR1

GAGAAGGGGCTTGAGTGGGTTGCTGAAATTCGATTGAGATCTGAAAATTATGCAACACAT 240
E K G L E W V A E I R L R S E N Y A T H 80
CDR2

TATGCGGAGTCTGTGAAAGGGAAATTCACCATCTCAAGAGATGATTCCAGAAGTCGTCTC 300
Y A E S V K G K F T I S R D D S R S R L 100

TACCTGCAAATGAACAACTTAAGACCTGAAGACAGTGGAATTTATTACTGTACAGATGGT 360
Y L Q M N N L R P E D S G I Y Y C T D G 120

CTGGGACGACCTAACTGGGGCCAAGGGACTCTGGTCACTGTCTCTGCAGCCAAAACGACA 420
L G R P N W G Q G T L V T V S A A K T T 140
CDR3

CCCCATCTGTCTATCCACTGGCCCCTTGTA
P P S V Y P L A P C V

FIG. 61

CDR1 Comparisons

1G8	1gG _{1k}	Middle	G	F	N	I	K	D	Y	Y	I	H
2H9	1gG _{1k}	N-Term.	G	F	T	F	S	N	Y	W	M	T
4A10	1gG _{2ak}	N-Term.	G	Y	T	F	S	S	Y	W	M	H

CDR2 Comparisons

1G8	1gG _{1k}	W	I	D	P	E	N	G	D	T	E	F	V	P	K	F	Q	G		
2H9	1gG _{1k}	E	I	R	L	R	S	E	N	Y	A	T	H	Y	A	E	S	V	K	G
4A10	1gG _{2ak}	N	I	D	P	G	S	G	Y	T	N	Y	A	E	N	L	K	T		

CDR3 Comparisons

1G8	1gG _{1k}	G	G	F													
2H9	1gG _{1k}	L	G	R	P	N											
4A10	1gG _{2ak}	R	S	T	M	I	T	T	G	F	A	Y					

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378</
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FIG. 62

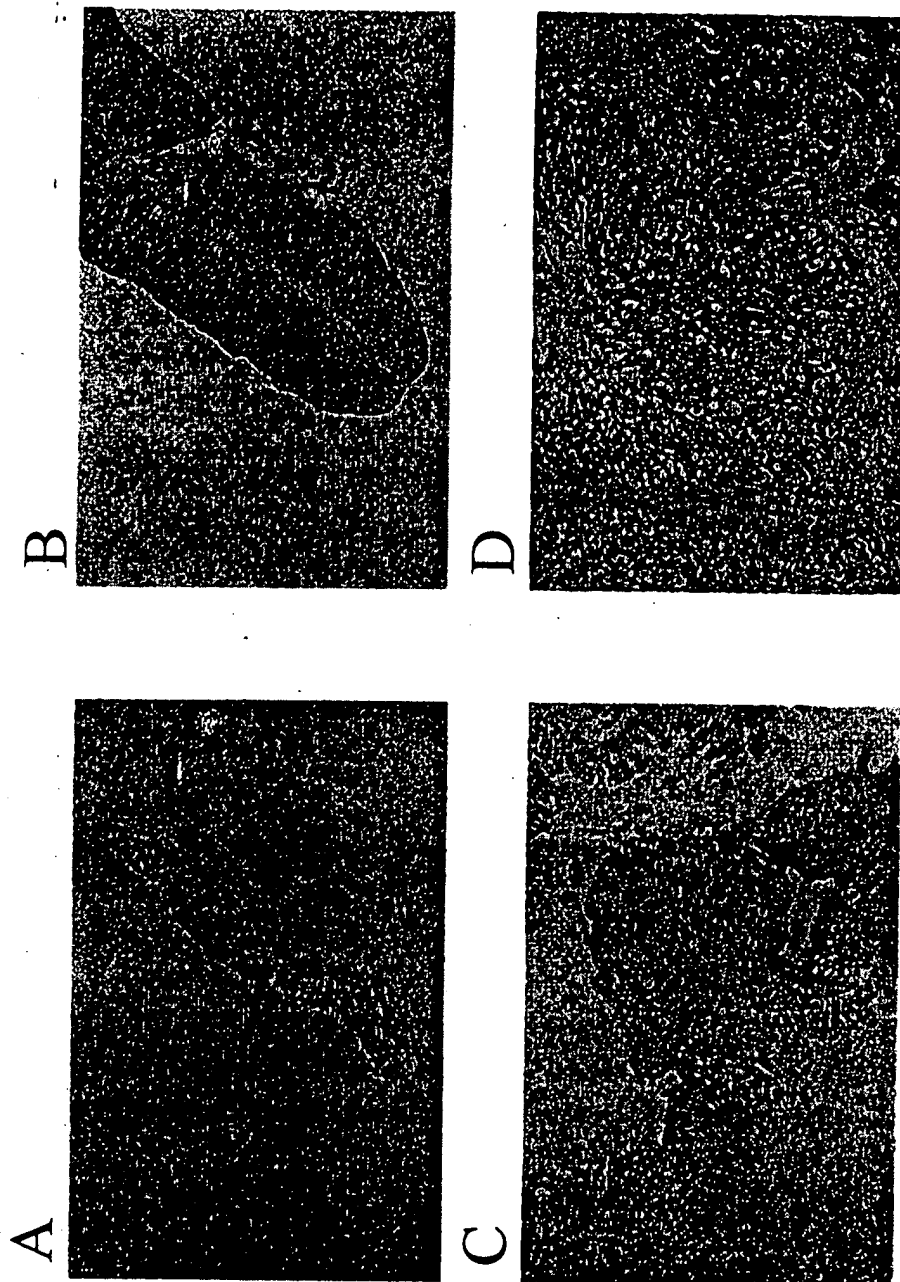


FIG. 63

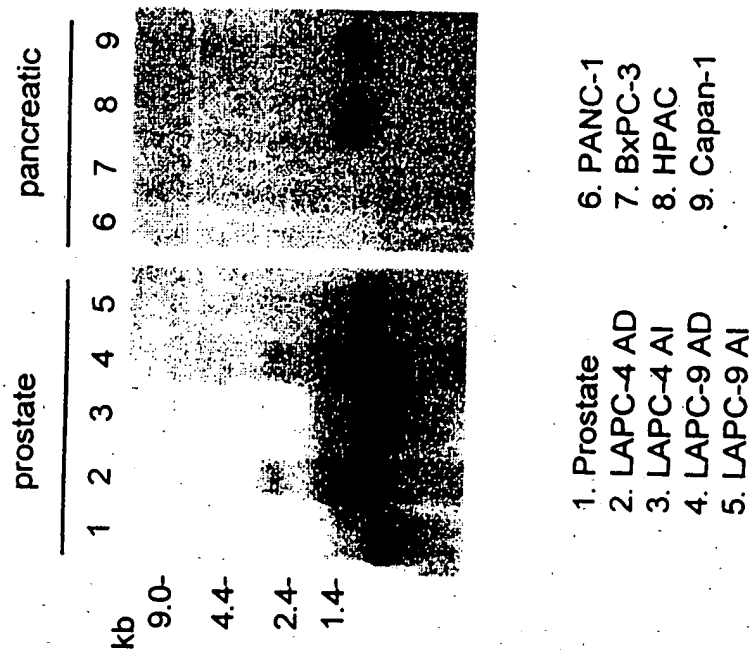
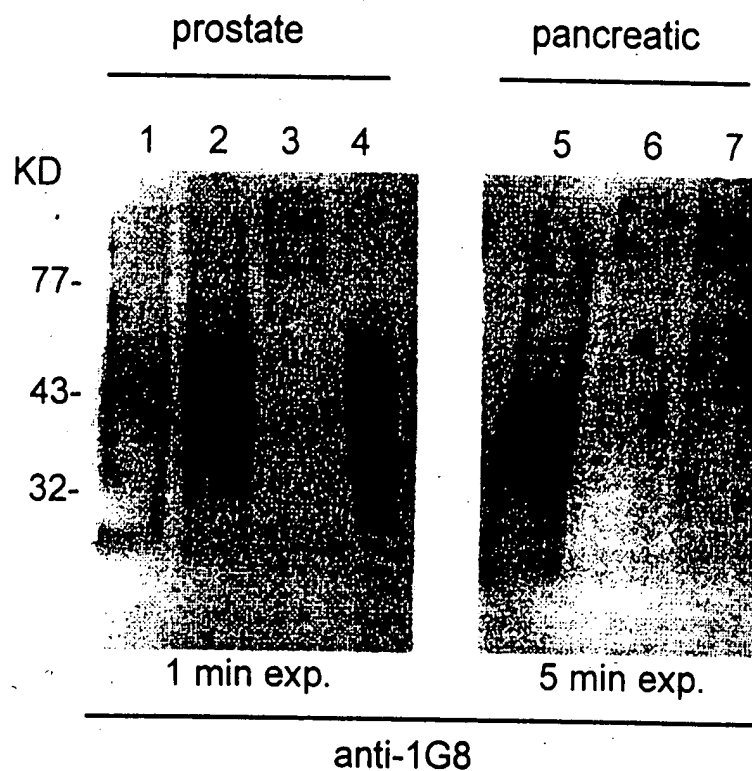


FIG. 64



1. LAPC-4 AD
2. LAPC-9 AI
3. LNCaP
4. LNCaP-PSCA

5. HPAC
6. Capan-1
7. ASPC-1

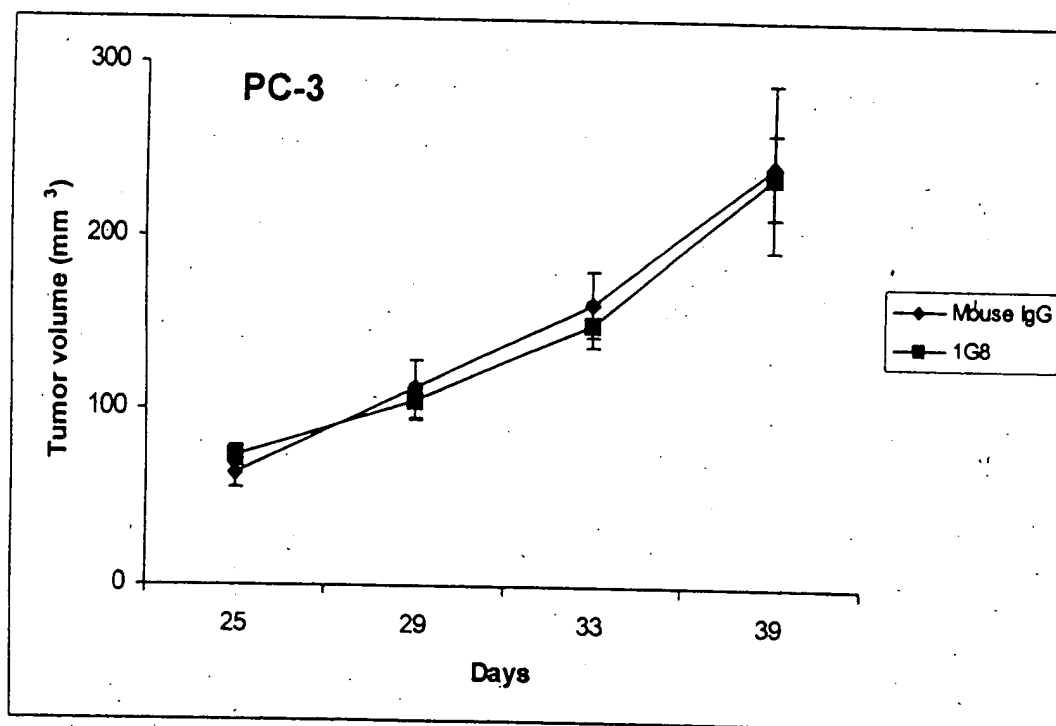
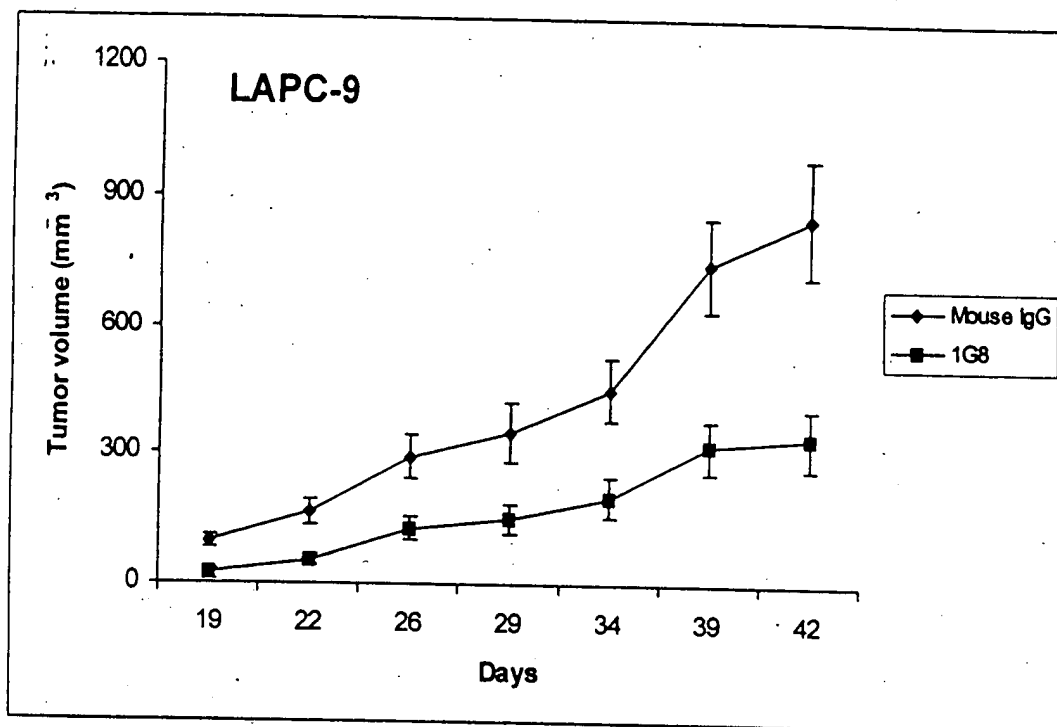
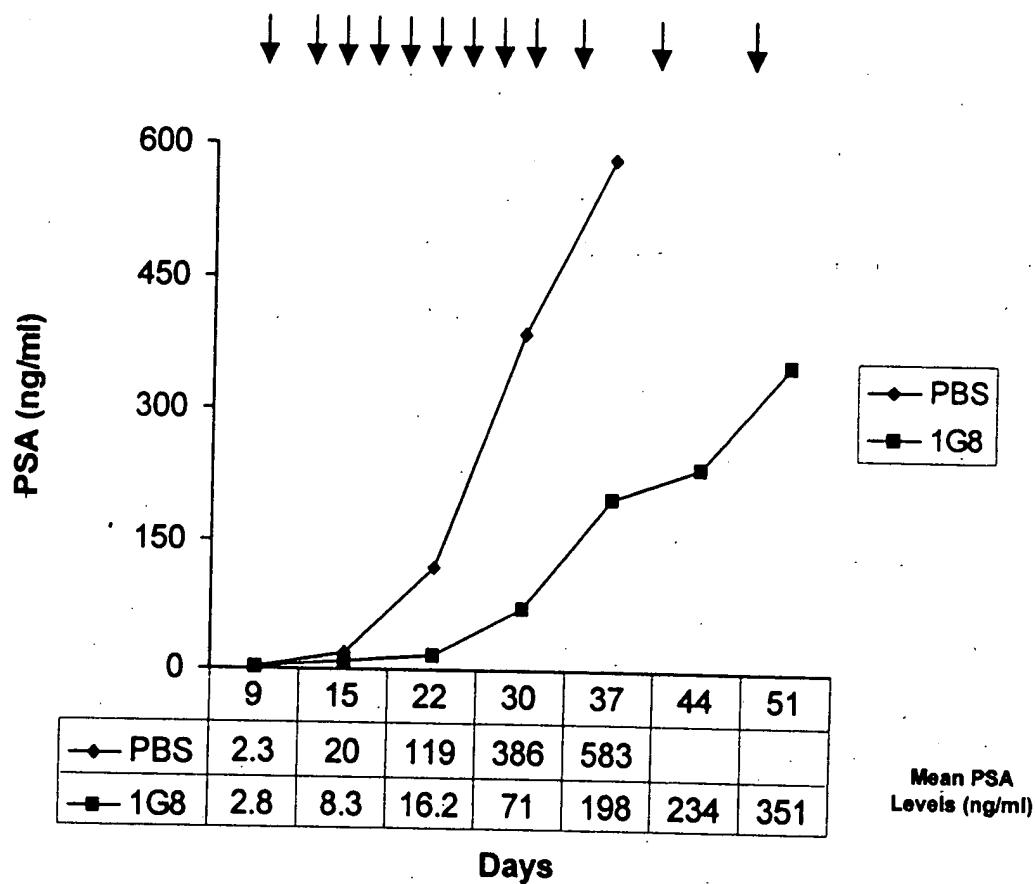


FIGURE 65

A)



B)

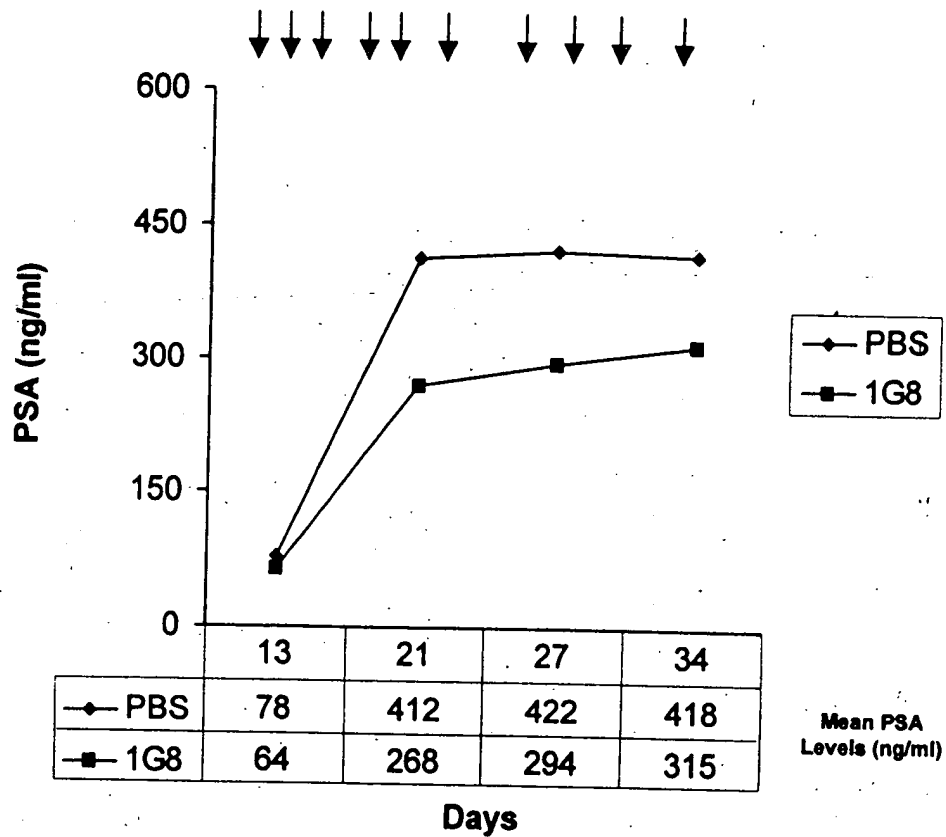
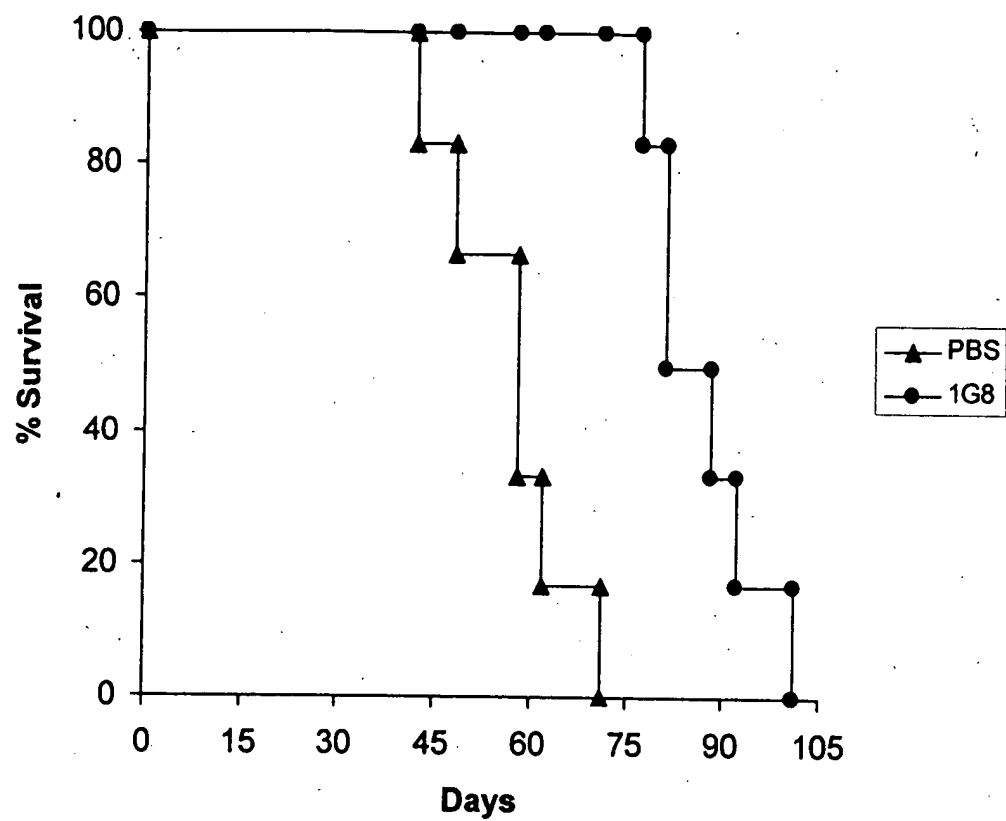


Figure 66

A)



B)

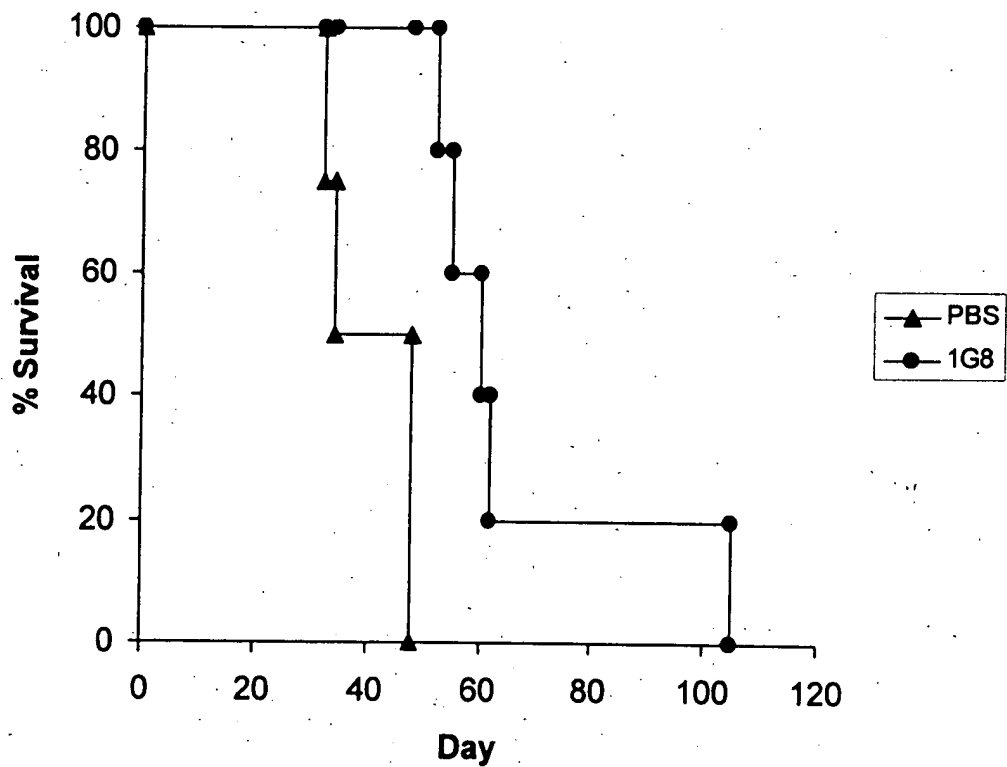
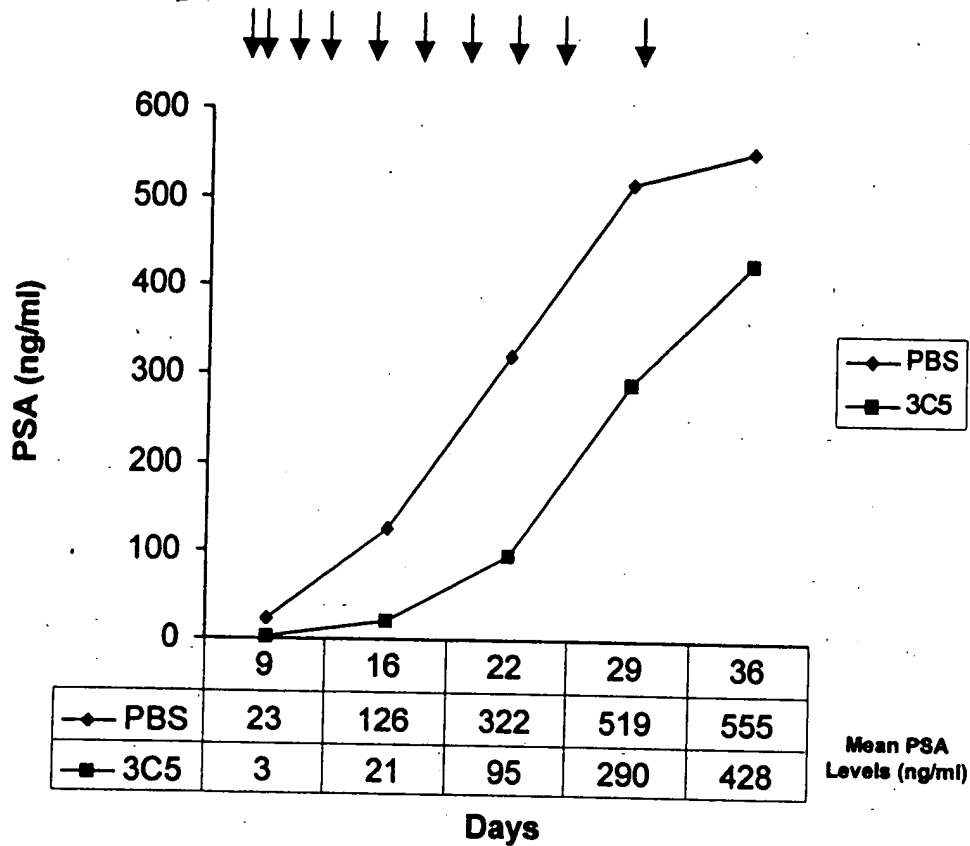


Figure 67

A)



B)

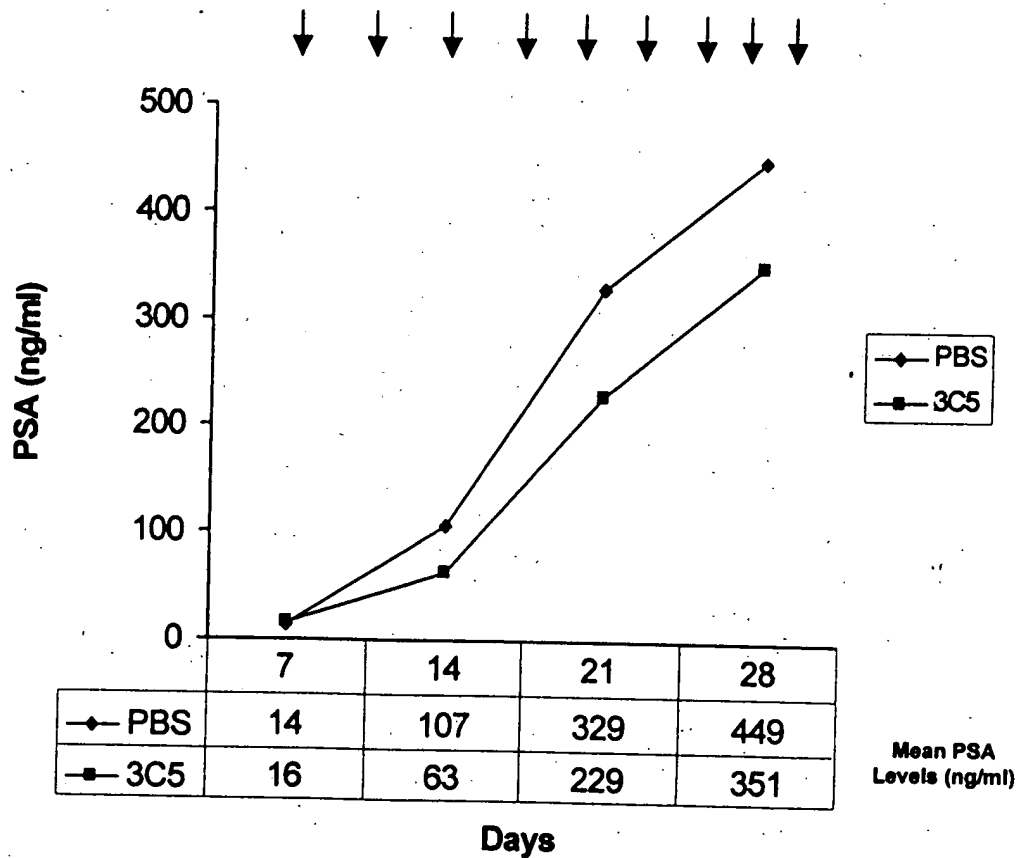
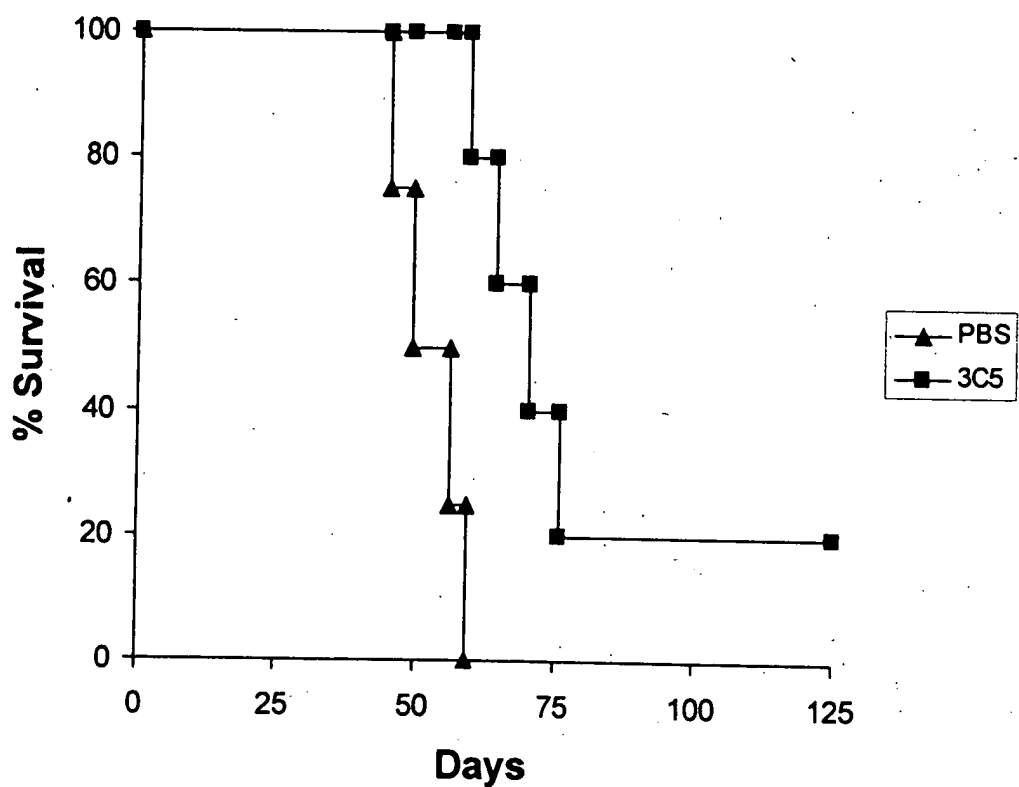


Figure 68

A)



B)

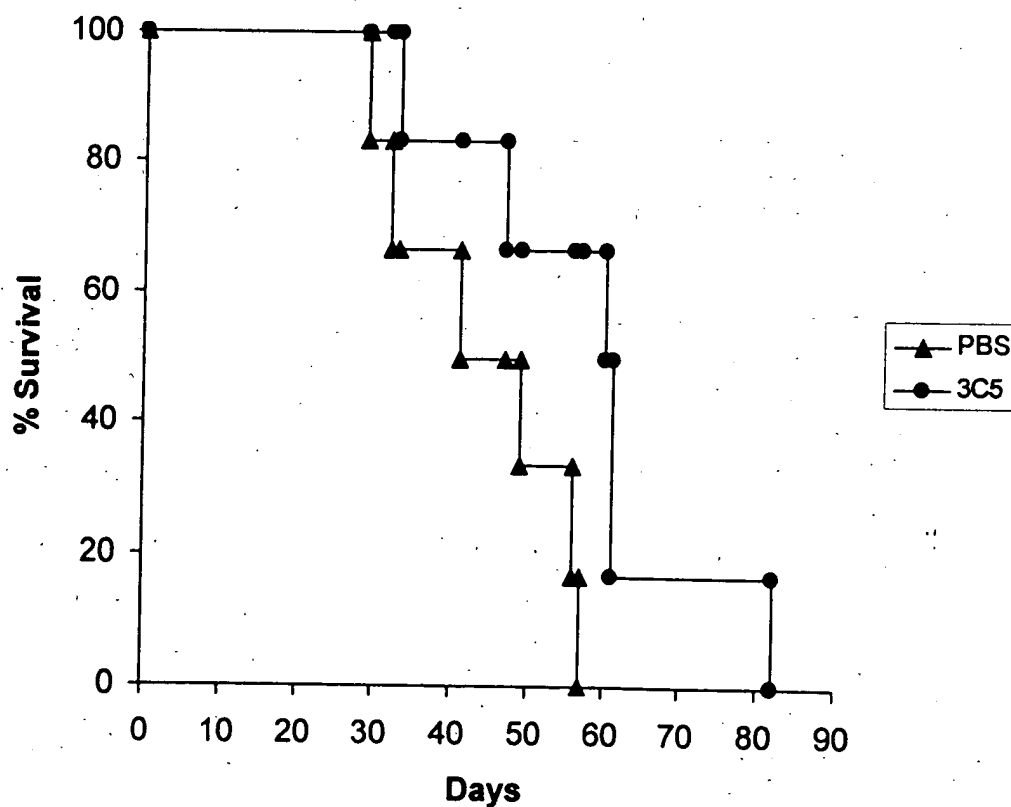


Figure 69

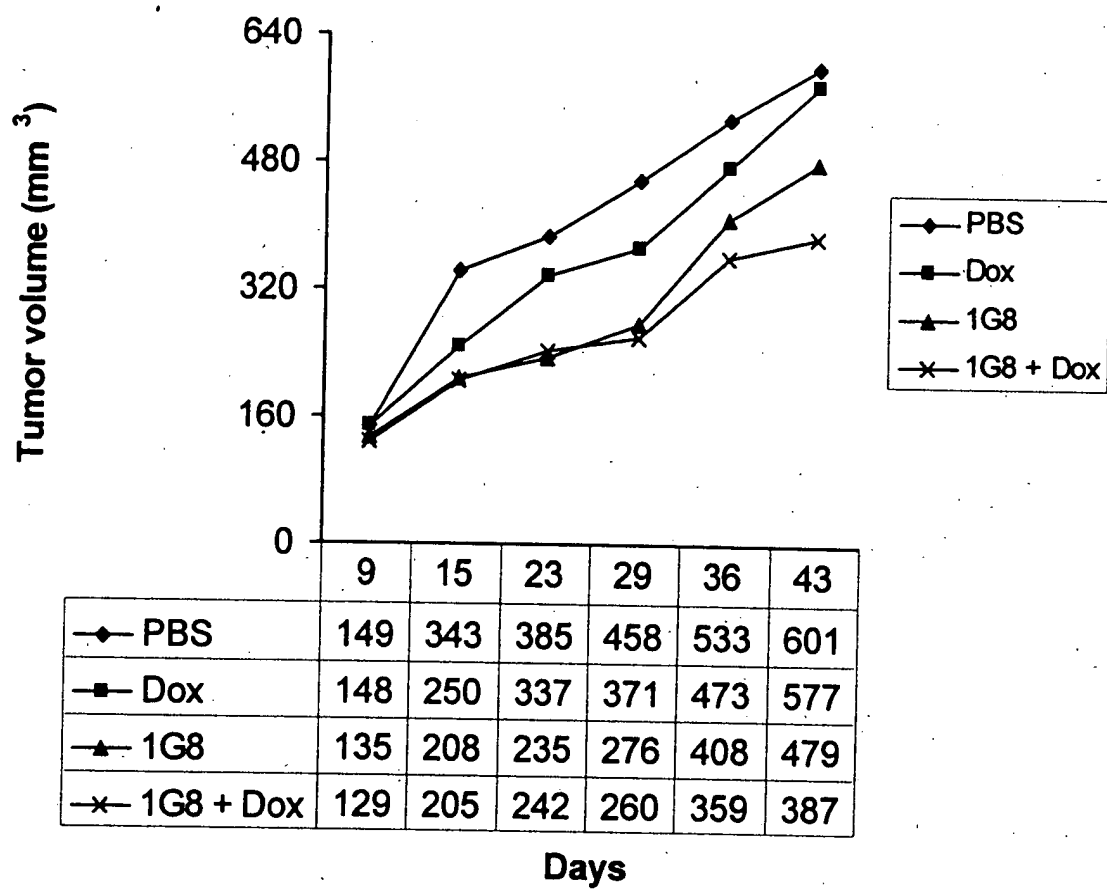
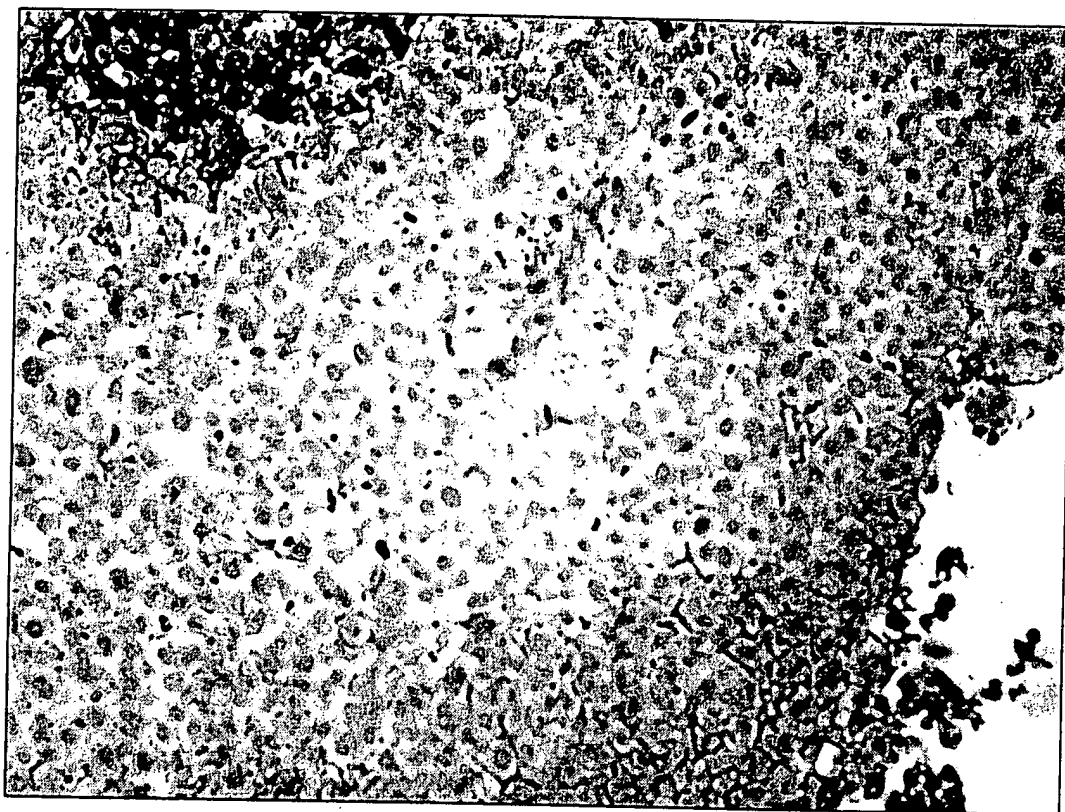


Figure 70

PSCA 3C5 MAb Localizes within LAPC9AD Xenograft Tissue

3C5 Treated



mlgG Treated

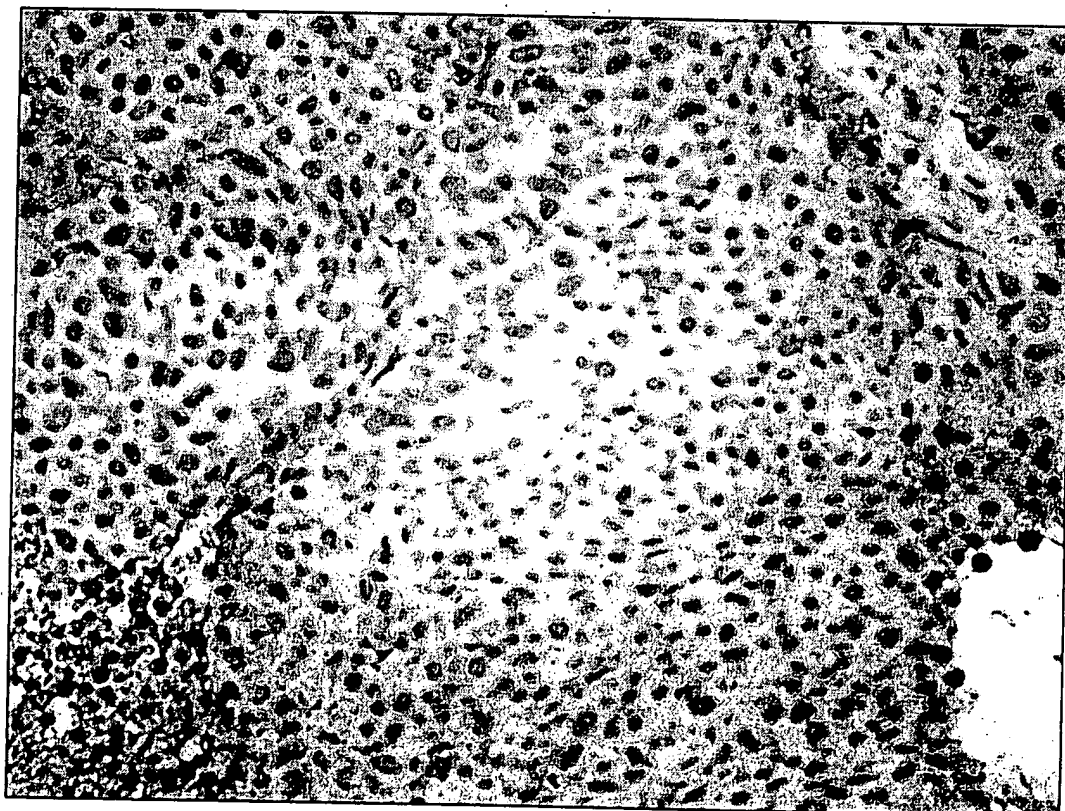


Figure 71

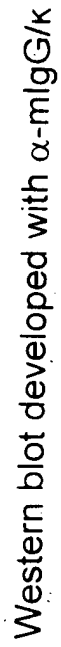
[illegible]

Figure 72

[illegible]

Method: Mice bearing established LAPC-9 tumors ($>100 \text{ mm}^3$) were injected with either mIgG or the anti-PSCA MAb 1G8. Tumors were harvested a week later and made into protein lysates for Western analysis.

Figure 73